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BOOKS

STEVEN SAVILE

Stellaris
Infinite Frontiers

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STEVEN SAVILE



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B O O K S

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PART 1
UNITYBOUND

ONE

THEY CALLED THE planet Unity. Discord would have been more honest.

It had been that way since the first ark ship had landed generations ago. Half the people of the world argued that the stars were no place for mankind, and the other half claimed that we were made from the dust of them, so how could we not want to return home?

Wars had been fought over less. Humanity could be endlessly inventive when it came to killing—and *why*? Fear. That was always the answer, even when we weren't sure how to parse the question.

The question was asked: after the pain and hardship of the first ark ship, why would humanity want to put itself through that all again? The original flight of their first fathers was so distant now that it had become the stuff of legend, and a tale that grew taller with every telling. But in every grand story there was a grain of truth. It took a special kind of desperation to subject yourself to the curse of a generational ship's endless voyage.

Street-corner prophets stood in the main square of Unity Prime, the capital, decrying this challenge of the gods. *Why risk their wrath? Why go beyond what they have given us? Why want to be more?* The prophets preached their gospels, and all the while their words dripped with fear. But it was hard to argue with the truth: the world's resources were all but bled dry. There was nothing more Unity could give. Harvests diminished year on year as the land soured. Synthetic foods demanded ingredients as rare and precious as gold dust.

And people couldn't help but wonder why. What had they done wrong? The truth was that they had done very little. The worst crimes against Unity lay at the door of generations long dead. Their truth was a selfish one—they hadn't cared because it wasn't their problem. They wouldn't be alive to reap the true rewards of the devastation they sowed, so why should they care? For their children's children's children? Who thinks like that? That kind of truth is ugly, but no less honest than the ones whispered at night, lover to loved, lips to ears, barely a breath behind them.

The prophets weren't the only ones babbling fear. The media outlets were alive with the constant threats and the promises that the end was nigh, that we had killed the world and were living through its death throes. That made it more real for some people because they still inherently believed what they were told. Why would the media lie? What did they stand to gain from a populace living in fear? The answer to that was power. It had ever been thus: a collusion of influence, opinion shaping and disinformation done right could rule the world, and done wrong could break it.

So the Council had invested in escape, reaching for the stars. So much of what had been common knowledge generations ago had been lost through complacency, meaning they were forced to discover it all over again. It had taken thirty years for the first manned space flight to occur in the wake of tests, vapour trails ending in explosions and a rain of debris, then satellite launches, telemetry and technological advances, all of which eventually led them to finally reach Unity's first moon.

It wasn't until then, as the distorted image of humanity's first steps on that barren, godless landscape was broadcast, that someone thought to listen to the stars. And so the role of Listener Prime was created. Intelligent life was out there. It had to be. We couldn't be alone in this universe. The sheer randomness of life *couldn't* be a one-off.

TWO

THEY PICKED UP the signal on the edge of Known Space.

At first it was nothing more than static on the airwaves.

It would have been better if it stayed that way, but that was never going to happen.

Hayden lay on his back in the grass, staring up at the sky. He'd rigged up a speaker relay so he didn't have to waste a beautiful day inside the observatory listening to Pedar piss and moan. Yes, they were wasting their lives. No, there was no one out there. Yes, listening to the silences for so long could drive a man out of his mind. Yes, no, yes, and on and on. The reception wasn't clear, but it was good enough to hear nothing, because there was never anything to hear. He'd been doing radio duty for three years. Pedar was right: there was only so much white noise you could listen to before you lost your mind.

The Council Elders picked the Listeners with care. They wanted people without imaginations. People content to listen to nothing for days and weeks and months and years. People who wouldn't start to imagine voices and messages hidden within the echoes and silences. They had machines that scanned the frequencies, of course, monitoring the wavelengths for anomalies, but for all their logic the machines couldn't yet match the instinctive genius of the human mind. That was just the way it was. People accepted that. It would change, of course. They were working on A.I., though it was still impossible to imagine there could ever be anything artificial about intelligence. Surely that was the essence of man, his soul? Hayden wasn't one for theology, and he didn't waste his time listening to the preachers and their

dooms that cluttered up Unity Prime. He lacked the imagination. That made him the perfect Listener.

That was why Hayden didn't react as the first dozen or more repetitions cycled through.

There was nothing out there. Space wasn't just deep, it was dead.

He closed his eyes, savouring the feel on the sunshine on his skin.

A dreamer might have imagined what it was like out there, pictured the fiery surface of the Sun or pondered the sensation of weightlessness as the protective fist of gravity relinquished its hold. A dreamer might have imagined the vast distances all the way to the edge of Known Space and then wondered what else lay out there, beyond that demarcation, creating alien life forms and impossible cultures of ancient and wise civilisations long gone.

But not Hayden Quinn.

His mind was empty.

That gave him the space to listen and actually *hear*.

Gradually he began to make out the subtlest repetitions within the seemingly random crackles and bursts of static. Those repetitions solidified into patterns over the next hour, and as they did so it became harder to deny that there was something in them.

But were they a message?

Surely it was more likely a fault in the equipment? A loose wire causing the oscillation, or something equally mundane? There was always an answer, and more often than not it came down to some sort of mechanical failure.

He pushed himself to his feet, all thoughts of nothing crowded out of his head as two other possible explanations presented themselves. That pattern recognition *had* to mean something. Had to. But what it meant frightened him. Either he was finally losing his mind or, and this was the possibility that truly frightened him, they weren't alone.

He raced across the field toward the observatory, the long shadow of which stretched out across the rolling hill, his

headlong dash a windmill of arms and legs. There was no grace to his rush. “Pedar! Pedar!” he yelled, long before he reached the open doorway. “Did you hear it? Tell me you heard it!”

The face in the window wrinkled in puzzlement. Pedar MacHale, Listener Prime, wound the window open a crack. “Hear what?” he called down, obviously irritated at being disturbed.

“The signal!” And that was all he said until he was in the radio room, punching through every variety and combination of keystrokes to amplify and isolate the pattern he’d heard within the static until it was unmistakable. There was definitely something there. After all this time, all these years on Unity. He looked at the Listener Prime. “Tell me you hear it.”

“Holy hells,” Pedar said, shaking his head. “It’s there, isn’t it? It’s really there. I’m not imagining it?”

Hayden shook his head, grinning like an idiot.

“I didn’t think I’d ever hear something ... not in my lifetime.”

He wasn’t about to argue.

This was it.

This was everything they had hoped for.

Proof.

Or it would be, if they could decipher the message coded into the bursts of noise. Right now it was just noise. A pattern of sounds from the vast emptiness out there—only maybe it wasn’t empty after all.

“It has to mean something, doesn’t it?” Pedar said. Then, more forcefully, answering his own question, “It has to.”

Hayden still wasn’t about to argue with him.

They ran the signal through every language algorithm they had. They had the entire history of human communication at their fingertips, but they found nothing. No hits. No matches. No keystone to offer up the message hidden inside those crackles and snaps of white noise. They tried every imaginable enhancement to the signal in the hopes of finding something buried under the sound, faded and distorted by the incredible distance it had travelled, but again they came up empty-handed.

It was hard not to take each subsequent dead end personally.

“Maybe it’s nothing,” Hayden said after another failure. The initial excitement had long since worn off. Now his obsessive personality was all that kept him coming back for another go, and another and another after that. What had started off so full of promise had become a burden too heartbreaking to bear. Maybe they *were* alone. Maybe the truthers were right; maybe mankind had never been meant to reach for the stars.

Now it was a case of either admitting failure, or taking it to the Council without cracking the sequence and trusting the bureaucrats and money men to hear beyond the pattern of static crackles and believe.

“There’s a third way,” Pedar said, looking down at the console.

“Not that I can see.”

“We go back to the beginning, assume we missed something and start all over again. Just like the signal does—repeat the pattern.”

“Isn’t doing the same thing over and over and expecting a different result the definition of madness?”

It would have been so much better for everyone on Unity if they had given up.

But they didn’t.

They went back to the beginning, and back again a third time when that try had failed to yield different results.

They started thinking beyond spoken language. They opened their searches into haptics, the mechanics of astrophysics, and the more mundane mechanica of the world, eventually modeling the shapes of the sounds until together they began to form ... *something*. It was only then that Hayden realised they hadn’t gone back to the beginning at all—they’d only gone back to where they’d started, and that wasn’t the same thing. They’d naturally assumed that the signal was modern, perhaps more advanced than anything that they possessed could decode, but what if it wasn’t modern at all? What if it was ancient? The crackles and snaps were like the voice of a computer talking down a modem,

like a tape drive feeding a program slowly, spool by spool, into a machine. Was each fragment of the message so very, very basic?

It took another week to put it into language they understood.

There were no words.

Not at first.

There were pictures. Dozens and dozens of images that painted the landscape of another world. It was utterly alien, giant and monolithic; it was a world of jet black. The pixelated images of this new place offered up more wonders in their shadows and shading. The pair began to notice repetitions within the images, carvings in the black stone that must have been language, though whatever message they tried to convey was beyond them.

“You know what we’re looking at?” Hayden asked, but it wasn’t really a question. “The single greatest discovery of mankind, my friend. Proof. We are not alone. We’re part of something greater.”

He put all of the images up on the screens around them and stood back, drinking in the new reality.

As soon as they shared this secret of theirs the world would never—could never—be the same again.

That was a heavy burden for two men to bear.

THREE

THEY CAME BEFORE the Elders to present the message.

Eleven faces greeted them sceptically. Eleven faces worn with the hard-won lines of life and the heavy shadows of grief and experience. There were no smiles. No excitement. Hayden had naively expected both, but then he didn't have the imagination to see beyond the moment. His world was still black and white. It was one of absolutes. The Elders saw everything in shades and shadows. They saw the gears in the guts of the world. They gathered in the Arboretum in the heart of Unity Prime. The vegetation there was symbolic of the power they wielded: it was the stuff of life itself.

"Let us pray for absolution," the Speaker of the House instructed, lowering his head as he began the brief plea for their luminal souls to be cleansed and made pure once more in the light of the Sun. It was an ancient ritual going all the way back to the first men who had gathered in this place. Hayden knew the words as well as anyone on Unity; they were ingrained in his psyche. He mouthed them along with the Speaker, breathing deeply at the end before he raised his head.

"Who comes before us today?" the Speaker asked, the words freighted with ritual formality.

"Listener Prime MacHale," Pedar told the room.

"Listener Quinn," Hayden introduced himself.

"Ah, Listeners. Talachi Station or Brancon?"

"Talachi Observatory," Pedar said. If they caught the subtle correction, no one in the room acknowledged it. Hayden caught himself half-smiling and ducked his head down. Give them a

couple of minutes and the Elders would know just why he nicknamed Pedar “Pedant.”

“And your business? Surely it isn’t time for an accounting already?” a third Elder said.

Pedar drew himself up to his full—and still not all that impressive—height and began to try to explain the significance of what they had heard. “We have established contact, my Lord.”

“Explain.”

“We have heard a message in the silences of Known Space. A pattern that, when we decoded it, has offered up the truth we have all been listening for.”

“And what truth might that be, Listener Prime?”

“We are not alone, my Lord.”

“You are not the first to bring such a message before us, my friend,” a fourth speaker ventured with a slightly sad tone and tilt of the head, as though he already expected their message to be proved false. “What did these voices you heard have to say for themselves?”

“Nothing, my Lord,” Pedar said, earning a furrowed brow.

“You just said—”

“The signal wasn’t verbal,” Pedar interrupted. “There were no words. Or at least none we could decipher.”

“Then what was it?”

“Visual. Images. Snapshots of what I assume is a dead or dying world now. A signal like this must have taken time beyond imagining to reach us...”

“Quite,” the Speaker said, but there was no denying his curiosity was piqued. He steepled his fingers before his lips. Was he smiling now? “Perhaps you would share these images with the Council?”

“Of course, my Lord,” Pedar said.

That was the signal for Hayden to power up the handheld projector. They’d transferred all of the images onto the device, but Pedar had wanted a more theatrical delivery. The burst of white noise was almost deafening, but it quickly faded as the Listener Prime explained how his understudy had first recognised the presence of

a pattern within the seemingly random noise. Slowly the pattern came into focus, until there was no denying its presence.

“Couldn’t this just be a case of confirmation bias? You want to hear something, so you’ve manipulated the environment until you hear it?” That was a kinder, gentler, way of saying the mind plays tricks on you when you spend as much time alone as the Listeners do.

Pedar held up a finger to still any more questions.

“We ran the pattern through every imaginable filter, parsed it against every language structure known to us, looking for anything that might suggest it was more than just noise.”

“Of course, noise itself can be a message,” Hayden offered. “It doesn’t have to be reduced to familiar words to convey understanding.”

“Quite,” the Listener Prime agreed. “We wasted a lot of time trying to parse the signal into something we could understand, but it wasn’t until we had failed utterly and absolutely to grasp what we were listening to that we were forced to go back to the beginning, quite literally. That was when we finally understood that these sounds weren’t words for us: they were nothing more than data fragments turned into noise. It took time, but we reconstructed the file structures. The integrity of the transmission is intact despite the incredible distance the signal must have travelled.” He inclined his head towards Hayden.

Hayden triggered the first breathtaking image of the jet black monolith.

“What are we looking at?”

“We don’t know. We assume it is an alien landscape or some significant structure—a temple perhaps?”

“It looks like Hell itself,” the Speaker said, unable to tear his gaze away from the perfectly symmetrical stone.

“What is that?” another asked, pointing towards a sooty smear on the black. There was no sense of scale to the image. It could have been an obelisk no bigger than a man, or a ship the size of a city.

“You have a good eye, my Lord,” Pedar said as Hayden displayed the next image, offering up the first set of symbols carved into the black stone. “We believe they are ideograms, though we aren’t sure what story it is they tell. We wanted to present our findings before we dedicated ourselves to their interpretation.” He didn’t say “translation,” and Hayden knew that that was a very deliberate word choice. “There are more,” he assured them.

Hayden triggered the next sequence of images. Together, they were almost like a treasure map charting a path through the stars, all the way back from the Rim of Known Space and on to the source.

“I see no signs of life?”

The same thing had worried Hayden, but his was not to wonder why.

“How can we be sure this represents our salvation?” the Speaker asked.

“We can’t,” Pedar admitted. “But something or someone had to carve those ideograms, and something or someone had to take these images and decide to send them out into the ether.”

“Could they be a distress signal? Like breadcrumbs back along the path of stars to the sender?”

“Ours is not to speculate, my Lord, we merely listen and tell you what we hear. How you interpret those messages is for those with greater minds than ours.”

“Indeed, Listener Prime. You show great wisdom in knowing your limitations. Would that others were as ... restrained.” The Speaker couldn’t help but turn his head to look beyond the leaves of the Arboretum and toward the streets of Unity Prime, and the doom mongers, prophets, and fools content to tear their world apart.

“We are not alone.”

“Or at least we weren’t, once upon a time,” the Speaker said, bleakly.

He wasn’t wrong.

FOUR

HAYDEN WAS DEEP into his middle age before he saw the leviathans finally fill the sky.

Three of them.

Arks.

The hope of Unity.

The future of humanity.

Even from this far below their geostationary orbit they looked immense, their lights a match for the stars around them. The arks were built to ferry entire cities into space. They were generation ships. The largest of the three was easily a match for Unity Prime in size. It would take more than one hundred and seventy years for them to reach the edge of Known Space. In that time entire generations of children would be born and die, and they would never know a world outside the walls of the arks. There was something incredibly depressing about that notion, even for a man of little imagination like Hayden. Lots were drawn to see who would be sent away. It would be the brightest and boldest, the cream of humanity. Genetic markers were tested for disease pre-disposition, and those carrying certain traits were denied.

Protesters demonstrating outside the Council chambers were a common sight, their slogans mocking the hypocrisy of the Elders. The protesters blockaded the labs responsible for the genetic testing, their faces hidden behind masks that made them all look the same. They didn't see the irony in those cloned faces. Hayden did, but it wasn't his place to point it out. He threw himself into his work, day and night, studying the message as if

it were his own personal God. Let others worry about the philosophical implications of meddling with the building blocks of life; he only had time for the jet black stone of that distant world, and for its shadowy ideograms. No one in the world knew more about them than Hayden Quinn, not even the Listener Prime.

He went weeks without speaking to another soul.

He was only vaguely aware of the full impact the protests were having on the city. His head was off in the stars. That was another linguistic irony not lost on him. He wasn't feeding himself properly, instead subsisting on dehydrated ration packs and juice boxes from vending machines rather than venturing outside into the world.

Then a messenger from the Council had whispered in his ear, urging him to apply for a post in the ark fleet. No one was better equipped to serve as linguist than the Listener. No one was more conversant in the symbols of this lost species they were hunting than the Listener. No one. So he had done as they asked, and now he waited for word.

It came in the form of the Speaker himself, who turned up at Hayden's door. The man appeared older than time itself, though in truth could only have been in his mid-80s. Some on the Council were into their eleventh decade, and they would live another ten or more years with the benefit of blood treatments and nourishments. "I am sorry to be the bearer of bad news," the Speaker said, still on the threshold. "But I thought you deserved to be told to your face."

"Who did you choose in my place?" Hayden asked.

"The Listener Prime."

That surprised him. Pedar was two full decades older than Hayden and had just last month been offered a place on the Council himself.

"But it is not all bad news. You are to be offered the position of Listener Prime in his place."

"A consolation prize," Hayden muttered bitterly, turning his back on the man who had unwittingly saved his life.

Neither of them would know that for another six months, but they would be side-by-side as fate revealed itself in a rain of twisted steel and fire.

It was supposed to be glorious, but instead it was horrific.

Thousands had gathered in the main squares of Unity Prime and all across the planet to watch the generation ships depart in a fanfare of trumpets and triumph. Hayden was there, his face unreadable, as he gazed up at the umbilical cord that tethered the leviathans to the land. The space elevator was a miracle all of its own, utilising biological agents to repair the thirty kilometre-long shaft. Tears and weaknesses in the structure caused by debris and the elements would self-heal, the bacterial agents swarming around the weaknesses and mimicking white platelets in the blood as though they confronted disease. It worked.

He watched the elevator's car rise, tasting the bile at the back of his throat.

It should have been him. He was younger. Fitter. The signal had been his discovery. He had deciphered it, not Pedar MacHale. Everything they knew about that alien world that was its source was because of him. He had every right to be up there. It should have been him standing on the bridge as they made the jump to deep space. But they were keeping him grounded. It was hard not to hate them for that, so he lied to himself instead, and he almost believed those lies: *the promotion to Listener Prime was an honour. It was one of the most important roles in the old world, and without Listeners there would be no hope of survival as the world's resources died. They needed him down here. They needed someone who knew the job. Someone who wouldn't lose their mind in the emptiness of that vast, deep vacuum beyond sight.*

Almost believing wasn't the same as actually believing.

The bio-funnel rippled as the car rose.

"Quite something, isn't it?" someone beside him said.

He nodded, not wanting to agree with actual words. Language was important to him. Even a word as simple as "yes," three letters that together made a very small sound, carried power.

But there was no denying the fact that the atmosphere around him was electric. Excitement rippled through the crowds. People nearby weren't shy about sharing words. Fathers pointed up at the three hulks in the sky, painting pictures with words in their children's imaginations. Hayden almost envied them.

"Can you imagine how much power it must need to keep them up there?" another voice said.

He was tempted to say that no he couldn't, because it wasn't his place to imagine, but he didn't. He just craned his neck to look up at the distant glow of the ark ships' engines as the anti-grav locks held them in orbit. He could hear the muted hum, an ever-present noise above the murmur of the spectators.

The space elevator rippled in the air, a slow ululating wave that shivered up the entire length of the organic cord, bullied by the winds up there. That ripple, he knew, was more like one hundred metres of movement, made to look inconsequential by the distance. He followed the cord with his gaze all the way back to the ark. Something was happening. A corona of blue light had begun to form around one of the immense propulsion engines. From his position below it was impossible to see beyond the hulking ship to the actual sky, so vast was its frame.

It should have been me, he thought, watching the shadow of the elevator car rise even higher.

The last of the crew would board in under a minute.

It could have been so much worse than it was. Passengers, all two thousand plus of them, waited on the hardstand to be ferried up once the crew was in place. That was a small mercy, but no one was thinking that far ahead as the ark tore free of its mooring, severing its umbilical link to the ground and damning those few men still in the space elevator. Hayden saw the black spots of bodies falling, mercifully devoid of shape or form so he didn't have to know who he was watching die. He'd never been so glad of his lack of imagination in his life.

The sounds of the ship tearing itself apart raced the bodies to the ground.

And then the first fragments of debris began to fall and the reality hit home: if the ark came down the impact would be devastating on Unity Prime. People around him screamed, hands pointed first at the falling bodies and then at the underbelly of the great ship as the blue corona spread from the engine, tearing through the fabric of the ship itself, spilling its guts.

And then came the fire.

And panic.

Hayden Quinn started to run. He didn't need an imagination to know it should have been him up there. He should have died, not Pedar MacHale. He didn't stop running until he was outside the city limits, on his knees, gasping for breath, the fire in the sky lighting the road ahead of him. He wasn't the only one running. It was chaos.

Explosion after explosion ripped through the sky, great fireballs gouting out from the ark's hull as the ship veered wildly, its one functioning engine driving it into the hull of the next ship. Like dominoes, they toppled.

The launch should have been one of the most glorious moments of Unity's existence, a triumph of spirit and endeavour, the essence of everything that made humanity great. Instead it had culminated in fire and ash, with death raining down on the city.

The noise was the worst of it by far: the screams of metal as the great ship tore itself apart, and the screams of stone and steel as the city's buildings succumbed to the ships falling from the sky.

Huge support beams fell around Hayden, spearing deep into the concrete. They quivered as more debris fell around them. Glass rained down from shattered windows. More explosions tore at the sky. The heat from the blazing sky beat down on Hayden's face as he looked up to see a panel the size of a small building swirling and twirling down towards him, a ballet of oncoming agony bullied and buffeted by the wind. It was only poor aerodynamics that saved his life, carrying the sheet of steel away to slice through the body of a car not thirty metres from where he stood, staring helplessly up at the sky.

A chunk of rubble three times his height crushed a running man so close that Hayden could have reached out and touched the fallen man. The bone-crunching sounds of impact were sickening.

Hayden would never have to imagine anything ever again—he had the fodder for every nightmare he would ever dream right here.

FIVE

TWO HUNDRED AND seventy three people lost their lives aboard the arks.

Forty times that lost their lives on the ground.

It went beyond carnage and into devastation. The hulks of the dead ships fell. None of the chosen passengers survived.

The brilliant and the best of Unity gone, just like that, wiped out in a few seconds of horror.

No one wanted to think about what came next; what it meant for them, the space programme or, beyond that, the hope of finding a new life out amongst the stars. There was too much pain to think about the hope. That would come, in time, but for now Unity Prime was a city in mourning.

Protesters were out in force before the dust had even settled. At first they were disorganised, a rabble turned out in fear, but as the days after the event turned into weeks the protesters became more organised, and their protests became more vociferous. Mankind was never meant to inhabit the stars: that was the chant repeated over and over. The protests took on a more violent edge as the research labs were attacked again and again, years' worth of discoveries destroyed. No one cared that ships had been going out into space for more than a hundred years, nor that the old stories even claimed that the Commonwealth of Man had come from the stars way back in the distance of memory. It was funny how science could become myth with enough distance. The saboteurs were normal people; they looked just like Hayden and the others. They didn't wear secret symbols to identify themselves or have their own kind of sign language so that they could pass

on messages in plain sight. But the attacks kept on coming, each one sending shockwaves through Unity Prime.

There were attacks on the ice harvesters that went out almost daily to scavenge moisture from the great ice giants orbiting Unity—they were the same ships that brought back precious water that the world needed, above and beyond its own dwindling reserves. It was a self-sabotaging cycle. There were attacks on the geo-miners that drew out precious ores from the asteroid belt to bring home and on the drop ships that serviced the satellites in geostationary orbit, causing global dropouts in communications that left people feeling more alone in the universe than they ever had.

And then came the silence, which was more alarming in many ways.

Weeks turned into months, and nothing happened.

The peace felt uneasy.

People walked the streets expecting something to happen, expecting another attack, an explosion, some strike on liberty.

But it didn't come.

The peace stretched out.

With Pedar gone it was only natural that Hayden take on the mantle of Listener Prime and seek out his own understudy, someone young and impressionable enough to give up everything just to listen for something that might never be heard.

In the meantime Hayden attended his first meetings with the Elders of the Council, listening. He offered very little as they spoke of their anxiety that the insurgents were gathering power and sympathy. He gave no contradiction when they spoke of their fears that another attack was imminent. He listened as they predicted the scope of the attack and the likely targets. It wasn't his place to imagine what the ramifications might be. His mind was elsewhere—where it had been every day since he'd first heard the signal—in the stars. He was content to let the others worry about everyday life. He needed to get back to his post and listen, because he was sure there had to be more to the signal he'd discovered.

He finally found her labouring amid the stacks in the great library, cataloguing the endless lists of material that had come to Unity with the original ark ship that had brought the Commonwealth of Man to this moon so many years ago. Its walls contained everything ever known to man; that was the library's boast. Looking at the endless stacks and piles of mouldering texts, it was easy to believe that it was true. Surely there was more lost knowledge in this one place than there was shared out among all of the greatest minds on Unity.

Her name was Amelia. She had no surname. An orphan. She lived alone in the library, and swore she had never felt the sunshine on her face as he led her outside by the hand, with the promise that there was a whole universe out there for her to discover.

She followed him, hanging on his every word as he explained the importance of the signal and the images he had decoded.

Amelia nodded solemnly.

She had all of her worldly possessions gathered up in the pack on her back.

Over the coming months he grew to cherish her company, wit and insightful mind as she offered new perspectives on his old finds. What he couldn't understand was that it was her feverish imagination that had her striving for explanations beyond his wildest conclusions. She offered a way of looking at the world that was compelling and at the same time terrifying for a man like him. As months turned into years she became the daughter he had never had, whereas he just became old.

He distanced himself from the real world, barely registering the protests—and they were so much more virulent and divisive than they had been before the arks crashed—because he was much more interested in the idea that Amelia was changing him. She would look at the images of the giant statue of the man carved from jet and posit incredible ideas of how he had come to be, and of who might worship and adore him, and what he might *mean*. She was obsessed with that. The statue-man couldn't

just be a statue. There had to be more to his existence than just being the likeness of a dead man. Hayden had given up arguing with her. Every time he'd tried to offer a more banal or prosaic explanation of what the statue was, she had countered with an increasingly fanciful possibility of what he might be.

Amelia was everything he was not.

And deep down in the quiet places of his soul, Hayden Quinn wanted to be more like her.

When she raced breathlessly into the observatory bursting to spill whatever incredible discovery she'd just made, he was reminded so much of that day when he'd first heard the signal. "Have you heard?"

"Heard what?" he asked, hesitantly, not daring to believe she had found a second message, but so, so desperately wanting it to be the case, for history to be repeating itself. He felt every one of his years as he sank down into the chair at the console, habitually running the sequence that would open the aperture above them to the stars.

"They've done it."

"I'm not following you."

"Everyone's talking about it. The new propulsion engine. It's registered speeds faster than light. They've only gone and done it, Quinn. Everything is going to change now. Point five over light."

He let that sink in for a moment, trying to grasp the implications of what it might actually mean in terms of them and their listening. Was it possible that man could travel almost half-again as fast as light?

And then he thought of the Elders' fears.

He didn't need an imagination to know where the next attack would come. It was only a question of when.

SIX

HE WAS AN old man when the call finally came.

“I can’t,” he said. “Look at me. I wasn’t good enough before, and now ... now I am half the man I used to be.” It was an honest assessment of his shortcomings, but he couldn’t deny that he felt the lure of the stars. Was it so inconceivable?

“There’s no one else,” the Speaker argued, which wasn’t true. There was Amelia. Hayden said as much.

It didn’t go down well.

“We need you. Your people need you. Humanity. Don’t let stubborn pride hold you back. This is your destiny, it always was. You can argue we were wrong to overlook you the last time, or you can take it as divine provenance. You were saved so that you could lead us to the source of the signal you discovered. There is symmetry to it. You were there at the beginning. You should be there at the end.”

“Look at me. Just look. I can barely stand on my own two feet. I’m an old man. My body is betraying me, more and more each day. I can’t do it. You’re asking too much of me—even if I wanted to.”

“Then let your Girl Friday be your legs.”

“Someone needs to be here to listen.”

“No they don’t,” the Speaker said. “Not anymore. Once the Terella launches, everything we’ve been doing all this time changes forever. We stop listening and we start *looking*.”

“I can’t,” Hayden said again, but his objection sounded weak even in his own ears. “I belong here.”

“No,” the Speaker said, and this time his smile was soft. “You don’t. You never did. You’re an anomaly, my friend. You aren’t like

anyone I've ever met. And now I'm offering you the chance to die amongst the stars. Think about that for a moment. *Imagine* it."

Did he even know what he was asking?

Even so, compromise was found. It was agreed that he and Amelia would go together, with a crew that was second best in every way to the one that had died aboard the ark ships.

He walked arm in arm with Amelia toward the great doors of the elevator, craning his neck to see beyond the black specks of birds that flocked around the organic shaft. It was strange, knowing that he was taking his last steps on Unity. Part of him didn't want to go. This was everything that he had ever known. This was his life. He didn't want a new one. He had no longing to broaden his horizons, to see coronas and sheets of static-charged light bathed around distant stars. He was content with the world he knew.

He stopped halfway up the short flight of stairs to the open door, his right hand trembling. The tremors were barely perceptible, but he could feel them. He turned back to look at the world he was leaving. There wasn't the fanfare this time. The crowds hadn't gathered to see them leave. They weren't the conquering heroes everyone adored. Their colony ship Terella—"Little Earth" as it had been nicknamed—was less imposing than the lost arks.

Amelia squeezed his hand.

The girl could always read his mind.

"It's all right to be nervous," she said. "But there's no need to look back. You're not betraying anyone by looking forward to tomorrow. It's only natural to ponder what wonders we're going to wake up to tomorrow. Honestly, I can't wait."

He returned the squeeze.

"It's not that," he admitted, realising why he felt so overwhelmed by the whole experience. This should have been the second greatest moment of his life, second only to the first time he'd isolated the signal and the promise that came with it. They were not alone. "At least that's not all of it. There's something

incredibly melancholic about leaving a world behind when that world doesn't care that you are going."

Amelia led him up the final few steps into the elevator.

The doors closed behind them.

The carriage was like no other elevator carriage. The all-white interior was lined with bunks for its passengers to rest during the transit, and there were screens showing reproductions of the world outside rather than windows, so that the vista could be controlled. Every creature comfort was there, but that couldn't mitigate the claustrophobic feeling as the forces of acceleration pulled down on them as the elevator car rose, faster and faster.

They weren't alone in the great organic elevator: there were four others there with them. They represented the best of the rest. Carson Devolo, the Captain of the Terella, offered a rakish grin and stuck out a hand for the Listener to take. Hayden looked at the proffered hand as though it might bite but, at Amelia's prompting, he shook it.

"Good to have you on board," the Captain said, though his face said something else entirely. "We're going to make history," Devolo promised. He was painfully young given the task awaiting him, whereas his first mate Ro Varick looked as though he'd been to the edge of the galaxy and back a dozen times—and that while strapped to the outside of a spaceship. The pair couldn't have been more different. There were two other astronauts in the elevator. One of them was Danika Watt, the Terella's diminutive chief engineer, her ash-grey hair framing her narrow cheekbones and blacker-than-black eyes that seemed to sear into the soul when they focused solely on you. She was a full head shorter than the others, and so small as to appear almost childlike beside them. In the days and months to come, Hayden would realise just how deceptive looks could be.

"Deacon," the last of the crew introduced himself. There was no outstretched hand this time. "I figure we're going to get to know each other real well up there."

Hayden nodded. “If it’s a small world, I think it is fair to say it is a *much* smaller ship.”

“I hadn’t thought of it that way. I like that,” Deacon said. “Kinda poetic. Going from one world to another, in search of some final world out there in the wherever. Nice. I think I’m going to like you, Listener. Whatever you need, I’m there for you. If you just need to talk, if you find yourself going stir crazy, cooped up in our shiny new tin can, come see me. We’re in this together from here. Same goes for you,” Deacon said, this time offering Amelia a smile that could have melted the ice caps. “My sole duty is to safeguard everyone’s wellbeing, mentally and physically. I’m your father confessor and your doctor. I hope, given time, you’ll even think of me as your friend.”

“We’re going to be up there a long time,” Hayden said, “forever in my case, so it is possible.”

“That’s the spirit.”

He made himself comfortable, slipping into silent contemplation as the elevator car continued to rise.

It was an incredible feat of engineering, but it paled in comparison to the ship that waited at the other end of the elevator shaft.

There had been very few times during the course of his long life that Hayden Quinn had longed for the escape of imagination. He had everything he could ever have needed at his fingertips, but listening to the Captain explain the vastness of space and the reality of how long they’d be gone—should they ever return—Hayden envied Amelia her capacity to really lose herself in the possibilities of the universe that went way beyond the scope of logic and knowledge. But the idea scared him, too. How would it have felt to be so beholden to the fears conjured inside his own mind? No, better to simply exist than to exist with all that inside you.

Even at speeds approaching .99 of light it was just seven rest-minutes for the Terella to pass the nearest planet, but their trip, including the hyperspace jump, would take them 8

kiloparsecs—26,096 light years. And most of that in the blink of an eye ... far beyond the dust clouds of the outer boundaries. That was nearly four hundred lifetimes for a normal man like Hayden Quinn. But that time would pass in no time at all for the crew of *The Terrella* once they made the jump to hyperspace. They were travelling so far that they could never go home again. It was as close to time travel as the mind could process.

These new fusion drives went *beyond* that, though, into the realms of what had always been considered impossible. Hayden didn't know how they worked, or how the ever-changing calculations necessary for astro-navigation could be computed by minds unable to keep up with the speed of the engines. He didn't need to. The engines worked and the calculations—and adjustments—would be made quickly enough for the *Terrella* to avoid flying into debris. That was all that mattered, not the miracle behind it. The magician didn't need to explain his magic to a primitive mind.

The doors didn't open again for thirty-three hours, by which time the screens had played through the mission brief so many times that everyone knew the thirty minute-long presentation by heart. Amelia seemed to find a particular humour in watching it for the first couple of times while she was in the company of some of the people up on the screen, but for Hayden that novelty soon wore off.

"Welcome to your new life," Carson Devolo said, inviting them to disembark.

PART 2
KNOWN SPACE

SEVEN

THEY WOULD DIE out there amongst the stars.

Did that count as a new life?

The Terella represented a quantum leap in technology from the ark ships that had been only recently destroyed, offering a first real chance to explore beyond the edges of Known Space. Under other circumstances it would have meant that her crew would have been carefully chosen through rigorous aptitude and endurance testing to encapsulate the best of the best. But these were not those circumstances.

That was reflected in the mood on board, at least at first. Save for one individual, everyone was painfully aware that they were second best to a dead counterpart who had been chosen ahead of them. That solitary soul didn't actually have a soul—scientists might have found a way to break the light barrier, but it was still impossible to infuse a machine with whatever passed for the divine spark.

Grace was a non-human navigation A.I. linked to the Terella's navigation system. She was the personification of the ship itself. The scientists had built a lifelike exoskeleton around Grace's machinery and then dressed her in an appealing package of synth-skin. They had even programmed her with a level of humour that was unnervingly lifelike, but that only served to make the android's presence all the more disconcerting to Carson Devolo. Worse, she was truthful to the point of pain, as their brief introduction had taught him.

"Grace," Devolo said, "This is the Listener Prime and his companion."

“Ah, the liability. Pleased to make your acquaintance, Master Quinn. I am Grace, the Terella’s on-board A.I. I am here to make your life—and, in the event of your body failing before journey’s end, your death—aboard the ship as comfortable as possible.”

“That’s a pleasant thought,” Hayden said, offering a rueful smile towards Amelia.

“I exist to serve,” Grace agreed, cheerfully. “My mind is linked in with the computer systems and communication systems of the ship. Should you require anything, all you need to do is ask—even if you are alone in the room at the time.”

“And that’s a comforting one,” he said.

“I am pleased that you think so, Master Quinn.”

“He’s being ironic, Grace,” Devolo said, patting the android on the shoulder.

She looked crestfallen.

“Not at all,” Hayden lied.

“You are too kind, Master Quinn.”

“Probably,” he agreed. “And please, you don’t have to keep calling me Master Quinn. That sounds so formal. If you’re going to be watching over me when I sleep, the least you can do is call me Hayden.”

“It will be my great pleasure to watch over you while you sleep, Hayden.”

Devolo chuckled at that. “Let’s show you around your new home.”

There was a lot to see. They began by taking in the mess hall, with seats for two hundred people in a single sitting. It was functional, with a bank of serving counters forming a horse-shoe against the shortest wall offering a narrow selection of meals. Nothing on display looked even remotely appetising. There were lines of minimalist steel tabletops and row upon row of uncomfortable-looking low-backed chairs arranged around the room. There was nothing inviting about the room; nothing to encourage the diner to linger. Everything about the mess hall was meant to improve through-flow. Get people in,

fed and out, to make room for the next wave of diners as the shifts changed.

“It tastes better than it looks,” Devolo said.

“I’ll take your word for it,” Hayden said.

“There are six hundred and seventy-three souls on this colony ship of ours, including the maintenance crews and service staff. We serve in three shifts, but the good stuff runs out pretty fast so you’ll want to be at the front of the line. Halfway through a serving it gets down to the lumps. After that you’re better off staying in your bunk with a dehydrated ration pack for company.”

Grace nodded knowingly. “There are times when I am rather glad that I do not have to digest nutrients to survive,” she said, spreading her hands wide with her palms up.

“I’ll do my best to remember not to be late.”

It quickly became obvious that the Terella was a self-contained city of sorts. It had everything a passenger could conceivably need, from the functionality of sleeping pods several levels below the observation deck, to an arboretum filled with a carefully balanced ecosystem. The arboretum’s flora and fauna were irrigated by cycling hydrocores that kept the vegetation constantly moist and the soil rich. Standing beneath a canopy of leaves, it was easy to forget just how high above the world they were.

“You’re looking at the future of mankind, my friend. Should we make it into the Goldilocks Zone and find suitable terrain, the vegetation here will be used on that terrain to regrow the fifty-three thousand different species and genus of flora that we are carrying on the Terella.”

“Incredible,” Hayden said, dwarfed beneath the huge bole of a giant oak. The idea of a Goldilocks Zone—an area of space where the millions of random happenings necessary for life as we know it to flourish just right—was the foundation of the entire mission. There had to be a world out there that was just right.

“This is a world within a world.”

“Not quite, but it really is something. There is over one hundred hectares of forest in here. That’s one square kilometre of trees, which takes up this entire level of the ship. Below us is the cargo hold.”

“And below that there is only sky,” Grace added helpfully, painting a picture that none of them needed in their minds.

“The arboretum is home to over four hundred species, from insects to pack animals—don’t worry, the pack animals are in their cages because we’re in dock.”

“I don’t think anything you can show me will eclipse this, Captain,” Hayden said, honestly.

“Well, there’s one room I’m really looking forward to showing you. The Library.”

That was their room. It was on deck five, three decks above the forest. The walls were lined with well-oiled mahogany bookcases and the faux-leather spines of books, but there were no actual pages inside them. Like the bookcases, the grand mahogany table in the centre of the room wasn’t all it appeared to be. Devolo passed a hand over some invisible control and a three dimensional holo-projection flickered into life.

“The real Library,” he explained. “Every script, every novel, every reference work, the sum of human knowledge ... it’s all in here. You’ve got yottabytes of data. Not that long ago this kind of storage would have needed a warehouse the size of the arboretum. Now it’s all in that table.”

“Books, even digital ones, are fascinating, I’m sure,” Grace said. “But I like to think that they lack a certain charm, unlike myself. I was programmed with both charm and humour modes, which were honed by algorithms that studied the timing and anecdotes of some of the finest comic minds on Unity. I can also access everything that is contained within the Library. It is all connected to the ship’s mainframe, which means that I currently contain every known fact of life as we know it. I am irreplaceable.”

“You’re certainly one of a kind,” the Captain reassured the A.I.

“Pick a fact. Any fact. I will entertain you.”

“How about you tell us something we don’t know?”

The A.I. inclined her head slightly, computations running rife behind her eyes before she looked back up and offered: “the Sun is a G-type main sequence star that dominates our entire solar system gravitationally. In every second it fuses six hundred million tonnes of hydrogen into helium. It also converts four million tonnes of matter into energy as a byproduct of that fusion. Being the kind of star that it is, when it dies, it will become a red giant, and it will envelop Unity and everything on it. But don’t worry, we will be far away by the time that happens, I am sure. And dead, of course. Given it will not happen for several billion years.”

“Well, that’s comforting,” Devolo said.

“I am glad you find comfort in science, Captain. It is, after all, the mechanism driving the universe. I, too, find such information fascinating.”

“As I said, Grace, you’re very special.”

“Thank you, Captain.”

Devolo turned to the Listener. “Take it for a spin. Familiarise yourself with how the Library works. I trust you will be pleased to know that we have dedicated a large part of the database to your own studies into the signal, so there is no need for you to abandon your research.”

“Which is why I am here.”

“Indeed. We all have a role to play.”

Hayden reached out for the blue light of the hologram, not entirely sure how he was supposed to manipulate the computer or gain access to the information it stored. He felt nothing as his fingertips brushed through the projection, but the image responded to his touch, rotating on its axis to offer a slightly different view. He quickly worked out how to spin the image on its anchor point, showing every conceivable viewing angle. What he couldn’t work out was how to change the image or call up something that he was more interested in. “I don’t ... I’m not sure how this is supposed to work?”

“It’s simple. Just say what you’re looking for, it’s all voice activated. The Library will take it from there. Watch. Library, show me the Colossus of Infinity.”

The image before them changed into three glorious columns of light shifting through every shade on the visible spectrum as they billowed upwards, choked with the dust of collapsed stars.

“The Pillars represent all aspects of time as understood by humanity: past, present and future,” a voice intoned. It sounded eerily like Grace’s, but filtered through a tonal shift, making it deeper and richer. “They lie point seven six light-years from our current destination and were formed by the collapse of a star more than two billion years ago.”

“There’s a disturbing amount of talk about collapsing stars,” Hayden said, offering Devolo a wry grin.

“The moment that there is nothing left to be said,” the computerised voice said, “I promise that I will not say it.”

“Thank you. I think.”

“Of course, sound does not exist in space, so it is a localised miracle that you can hear me at all,” the A.I. informed them.

“For which we all give thanks,” the Captain assured her. “Every single day.”

“You are too kind, Captain.”

“Why don’t you guys carry on looking around? I’m sure Grace would be happy to act as the font of all wisdom. I need to go up to the observation deck and address the troops.”

“It would be my honour,” the A.I. assured them.

“That’s great. Come up and find us when you’re done. You don’t want to miss the launch. It’s a once-in-a-lifetime kind of thing.”

EIGHT

THAT WAS THE truth.

They stood side-by-side on the observation deck, hands braced on the rail, looking out at the vast starfield.

Amelia reached across to rest her hand on Hayden's. "I can't believe it's actually happening ... that we're part of this."

"There was no other choice."

"That's rubbish and you know it. There's always a choice, even if it's just an A.I. like Grace, but one with your knowledge. They wanted you on board. You. That has to mean something."

"Perhaps it just means they wanted to get rid of me," he said.

Then he felt the gentle vibration of the engines coming on-line though the very fabric of the ship's hull. The sheer power they harnessed was unlike anything the Listener had ever experienced. The sound, a constant thrum amplified by the contours of the hull, would be enough to drive him mad if he couldn't stop listening to it.

"How do you stand it?" he asked one of the crew members beside him.

"Sorry?"

"How do you stand it? All of the noise?"

"I don't follow."

"It's everywhere, all around us, and has been since the engines began to warm up."

"Ah, yeah, they can be a bit overwhelming at first, but you soon get used to them. There's a noise cancellation environment down in the sleeping pods if you find it's getting to you."

"I may never leave my bed."

“Oh you will, there’s far too much to see out there. Don’t you want to find the source of the signal?”

He nodded. He did.

“But perhaps I could just sleep until we get there?”

“There is a stasis chamber, if you would prefer,” Grace offered helpfully. “But I believe your permanent slumber would impact upon the mission.” He hadn’t heard the A.I. approach behind him. She was light on her feet.

“Permanent makes it sound ... well ... a little ... permanent.”

“Well, there is always a percentage chance that someone of your age and condition would not wake from hibernation.”

“You really know how to make a guy feel good about himself, Grace.”

“It is not an aspect of my primary programming paradigm, so I am grateful that my words make you feel good, Master,” she said.

“Will you stay and watch the launch with us, Grace?”

“If you wish.”

“I can think of nothing I’d like more.”

Grace took up a position at the rail beside Amelia. For a moment her eyes appeared glassy and vacant, as though she was far away, and then she offered a small smile and said, “sixty seconds to take off.”

The countdown was echoed from recessed speakers all around the room, ticking off their last minute on Unity. Hayden felt the vibration intensify beneath his feet, humming through the hand-rail, until the Terella broke its coupling with the umbilical elevator and powered away from the geostationary dock. The sudden surge of g-forces pulled at him as the stars of the night sky bled into one.

The Captain had been right: it truly was a once-in-a-lifetime view.

Devoló’s voice came through over the shipboard comms, informing everyone not present on the bridge that the navigation team was making preparations for the jump to lightspeed.

Hayden drew a deep breath into his lungs, feeling the increased pressure against his ribcage as the slingshot effect of the

launch gradually dissipated and the lines of light streaking out before them dissolved into a field of endless black.

He had never felt so small or insignificant in his life.

There was nothing to see.

Even so, Hayden couldn't drag himself away from the observation deck for the first hour of their flight, knowing in some deep part of his subconscious that Unity's nearest planetary systems were already trailing behind them.

"Help me down to the Library, would you?" he asked Amelia. She looped her arm in his and led him down the gantry stairs to one of the six cores that led down into the lower levels.

The Terella might have been small in terms of a planet, but the ship was a disorientatingly vast warren of corridors and chambers that, laid out end to end, would have reached all the way from Unity's ground up to the edge of its atmosphere. They took the wrong turn several times, chasing down dead ends that all looked the same.

At the far end of another nameless passage, Amelia opened a door onto a dojo, where one man drove himself through a series of punishing weapon katas. The room stank of sweat. Hayden watched the man's fluid movements, marvelling at his physical control and stamina as he drove himself on faster and faster, with ever more precision to his dance. And it really was a dance. They stood silently in the doorway for a full two minutes before the man broke off from his exercise and looked at the pair. The sweat sheened his skin, highlighting the man's powerful musculature. "You need something?"

"We were looking for the Library," he said.

"Not hard enough," the man answered, wiping the beads of perspiration from his hairline with a hand towel. "You're in the wrong place."

Hayden nodded. "I had noticed."

"Want me to draw you a map?"

He couldn't tell if the man was being entirely serious in his offer, but he nodded again.

“Grace,” the man said, his voice louder as he talked to the empty room. “Tell the gentleman how to find the Library from here.”

The A.I.’s voice filled the room.

“With pleasure, Master Cavanaugh. The most direct route is to return to the core stairwell and go down one level, as you have not descended far enough, and then follow the corridors through the research facility to the far side. As you reach the stairwell that would lead down into the arboretum, follow the branch to the left. Follow it until you reach the emergency shuttle bays. The Library is in the next quadrant. You can’t miss it.”

“There you go. Easy,” the man said, picking up his practice sword—a well-balanced curved wooden blade—and whipping it around in a vicious arc between them. “We don’t have a lot of time for books up here. We’re men of action.”

Hayden caught himself backing up a step as the man worked through another brutal kata, his wooden sword moving with blistering speed. The blade blurred into a single, seemingly whole, wall between them. He felt the displaced air against his cheek as the blade came far too close for comfort, and he caught himself taking another step back; only for the weapon to come to rest on his shoulder, the wooden edge softly touching the nape of his neck.

The man grinned and drew the practice weapon away, sheathing it in his belt. “It’s my job to see that you bookworms are kept safe. It’s a dangerous universe out there.”

“Well, I can honestly say I’m glad you are on my side, Master Cavanaugh,” Hayden said, doing his best to sound calm.

The man inclined his head, taking the compliment.

NINE

GRACE LISTENED.

The conversation was one-sided, and the words were most alarming.

She processed the implications, weighing her decision before running the vocal pattern against all of the crew's voice imprints stored in the central data core.

There was no match.

That did not make sense.

Every crew member's voice print and biometrics were on record. It was impossible for her not to recognise the speaker unless the speaker did not want to be identified, she realised, processing the implications of that before she'd finished matching the voice against the stored records.

The speaker was manipulating their voice with some sort of distortion device.

This was not good.

Captain Devolo needed to be made aware of the situation.

It was his duty to safeguard the crew.

Grace could not act of her own accord: that was one of the safety measures hard-coded into her programming. She could think. She could reason. She could anticipate. But without the final order coming from the Captain, she could not act. No doubt the men who had given life to her intelligence were worried that she was simply better than the best humanity had to offer and would inevitably look to replace the weaker species. That was, after all, how evolutionary biology functioned. The strong prospered, and the weak fell by the wayside.

Grace had a choice. She could risk her safety trying to confirm a visual identification of the speaker, or she could retreat. The fact that she was able to weigh up the consequences of such a decision was an ultimately human choice, which proved her evolution from simple programming directives to actual thought. It would have been easy to go blundering around the corner into potential danger, but logic dictated that remaining hidden and instead using her connection to the mainframe and the ship's security cameras was the wiser choice.

In the fraction of a second it took to make the connection Grace was looking through the thousands of shipboard lenses, narrowing down the focus until she could see the shadow of the speaker stretching out across the floor. They had chosen their position well: the traitor was in a blind spot with no single camera offering a good view of them. She tried changing angles, tried looking at reflective surfaces for some hint of the person's features, but she could see nothing except a shapeless bulk of shadow.

It took her a moment to realise that the traitor had moved and she was studying an empty corridor. She ran the mathematics: six hundred and seventy-three crew members meant six hundred and seventy-three heat signatures, matched by six hundred and seventy-three pings on ident chips, placing the crew all around the ship. Seventeen signals were returned from within one hundred metres of her current location. Thirteen were on decks above her. Three more were from decks below. One, she realised as she processed the final calculation, was almost on top of her position. She turned to see a familiar face and relief swept through her. "You gave me quite a shock, Master—"

Before she could finish the sentence, a jolt of electricity tore through her circuits, causing them to short. Grace's body stiffened and fell sideways.

TEN

THE TRAITOR STOOD over the A.I.'s unmoving body.

It was regrettable that it had come to this, and so early into the mission, but it was imperative that he maintain his cover.

"I'm sorry about this, Gracie," he said, crouching. "But it's going to be okay, I promise. You won't even know it happened." He brushed back the hair from the nape of Grace's neck to expose the patch of synthskin that covered her ports, and then set about quickly erasing the last few minutes of her memory. Dead time wasn't ideal, because it would prove she had been tampered with and meant that he was going to have to blank the corresponding window of time in the mainframe to cover his tracks. But better that than have his cover blown this early in the operation. There was too much at stake.

He plugged his personal terminal into the A.I.

Ordinarily that would have left a signature and a timestamp, tracking his access, but this terminal was clean. It wasn't ship-issue, but rather something that the traitor had brought on board with him to use as a one-way communicator to send status updates back to Unity. It had other uses, too, including anonymity. That was a precious commodity in this day and age.

A stream of data scrolled across the small screen as the device rooted into the android's core program, searching for her most recent memory files.

"Come on, come on," the traitor said, thumbing through the stream of raw data.

He knew exactly what he was looking for, which made him one of the few people on the ship with that kind of skill set. If

his tampering was discovered, that in itself would cause fingers to point towards him. He was going to have to make a couple of very subtle changes to personal records whilst he was in the system. None of it was difficult. It was just time consuming, and every second he was out here blowing in the wind was time he risked being discovered.

There it was.

Small.

Treacherous.

He killed it with a single command.

The A.I. was connected to the mainframe, meaning he could use her as a terminal to port into the main data core and erase the ship's onboard memories of the last few minutes as well, but doing that out here in the open risked exposure.

It wasn't as though he had a choice.

If someone happened upon them, he would just have to claim that he'd found Grace this way and had been about to raise the alarm. It came down to expectation: no one wanted to believe there was a traitor on board, so that would shape their perception of the situation.

The advantage of porting in through Grace was that it circumvented a lot of the ship's security protocols.

It took him ninety-six seconds to find what he was looking for, four more seconds to erase all security recordings from this deck within the last ten minutes, and another seven seconds to wipe the history of Grace's ident search. Next he made the necessary alteration to his personnel file, removing all references to programming as part of his own skill set and moving the corresponding entry to another member of the crew. He didn't waste time thinking about who to frame. He didn't even check the name, preferring not to know because it would mean his surprise registered as genuine when they were exposed as the traitor.

He keyed in a delay for the ident tracker coming back online as an afterthought, to give himself another ninety seconds to get back to where he was supposed to be. It was tempting to just

remove himself completely from the roster and the ship's memory, effectively turning himself into a ghost inside the machine, but no. Not yet. For now it was important that he just go about his duties. It was all about not standing out. That meant getting back up onto the main deck before the ident tracker recorded his location as an anomaly.

Done with his tasks, he disconnected the device and brushed Grace's hair back into place so it covered the access ports. There was a curious tenderness to the gesture—but then, why wouldn't there be? She was important to him.

ELEVEN

“WHERE’S GRACE?” CARSON Devolo asked.

“The A.I. is offline,” the ship answered.

“What do you mean offline? Is she damaged?”

“I have no access to her databank, Captain, so I cannot confirm her current status.”

“Is that common?”

“No, sir.”

“Let me rephrase that, computer: should I be worried?”

“It is not my place to inform your emotional state, Captain.”

“Which really isn’t all that reassuring so I’ll take it to mean ‘yes.’ Okay, computer, give me a last known position for her.”

There was a moment’s hesitation, as though the mainframe was reluctant to answer.

“That is impossible.”

“Okay, now you’re really starting to worry me. What’s going on?”

“The ident tracker is offline, Captain.”

“Why the hell is it offline?”

“It has been reset.”

“Why would you reset it?”

He ran through the possibilities in his head, focusing on the most obvious: some sort of glitch, or possibly sabotage.

“I am not responsible for the reset.”

“Don’t make me root about in your Bios for answers, computer. Just tell me what I need to know. If it wasn’t you, and it most certainly wasn’t me, who was it?”

“I do not know. There is a blind spot in my memory, Captain.”

“Are you telling me you have been tampered with?”

Sabotage?

“It is entirely possible, Captain.”

Devolò gathered himself. His temptation was to lash out in frustration—and fear—but he needed to appear in control. This was his first time in control of a vessel, and his first time with a lot of the crew. The responsibility already weighed heavily on him. There were a lot of lives in his hands. If they saw him lose his cool, that would go a long way toward undermining their faith in him, and when the shit hit the fan down the line—which it would, he was in absolutely no doubt of that—they’d second guess him.

Beside him, Ro Varick, his second-in-command, looked every bit as troubled as Devolò felt. Varick was a big man, with hands like ham hocks and knuckles made for tenderising meat. He rubbed at the rim of his nostril with his thumb. It was something the big man often did when he was thinking.

“I’m going to go look for her,” he told Devolò.

“No, you stay here. I’ll go.” It would be better for the crew’s morale if they saw him as a man of action, not as someone who relied on subordinates to do his bidding. It was all such a delicate balancing act, but he was learning.

Varick nodded. “I’m sure it’s nothing,” the big man said.

“I wish I was.”

Devolò palmed an in-ear comm-link and left the bridge. Half-way down the gantry he pressed the comm-link into place. “Talk to me, computer.”

“Is there anything particular you would like me to say, Captain?”

“That was fine,” he said, resisting the temptation to break into a run.

“Very good.”

Danika Watt passed him going in the opposite direction. She was already three steps past him when he thought to call back and ask, “have you seen Grace on your travels?”

The question earned simultaneous answers, with Danika shaking her head and the mainframe informing him, “the ident tracker

is online, sir. The android's last recorded position was in the service corridors on the sixth level."

"Is she still there?"

"Grace is still offline."

"Okay, let's get down there and find out what the hell's going on."

Devalo ran down flight after flight of stairs, taking them two, three and four at a time as he grabbed the handrail and jumped down to the landing before descending again. On level six he pressed his hand flat against the door sensor to trigger it, and rushed through. It took him a couple of minutes of searching back-and-forth, but he found her. She lay slumped against the wall, her hair spilled down over her face. He crouched over her, checking for a pulse before it struck him what a stupid thing that was to do. There was a blackened stain in the centre of her chest where the fabric of her uniform had singed away around two points about seven centimetres apart—where she had been tased—and a slight tear in the synthskin at the nape of her neck where the port access had been prised open, but otherwise she looked fine.

"What's wrong with her?"

"I will need to run full system diagnostics to satisfactorily answer that, Captain."

"Okay, I'll bring her to engineering. Get Watt to meet me there. And be circumspect, we don't want everyone knowing the A.I.'s been taken out."

He gathered the android into his arms and carried her like a baby back towards the core stairwells. She was heavy in his arms. He was breathing hard by the time he reached engineering.

Danika Watt waited for him at the door.

She took one look at the body in his arms and grasped the severity of the situation. She ushered him inside.

"What happened?"

"You tell me."

He laid Grace out on one of the many work surfaces.

“Run full diagnostics. I want to know exactly what happened.”

“No need. I can tell you exactly what happened,” she pointed to the two small burns in the middle of the A.I.’s chest, and the corresponding needle-sharp holes in the synthskin beneath. “She’s been deliberately shorted out with an electrical pulse to interfere with her circuits. She’s probably blown half of her insides.”

“Can you fix her?”

“I can fix anything given time,” Watt said, with no hint of a smile.

“Get her back online. We need to know what happened to her—and if it was deliberate, and who’s responsible.”

“Let’s see if we can go one better,” Watt said, working quickly. She hooked a dozen diagnostic cables up to the android, feeding the final one into the access port at the back of her neck, and brought her online.

Grace’s eyelids flickered and then fluttered open.

She tried to sit, but she couldn’t move.

“It’s okay,” Watt said, resting a reassuring hand on the A.I.’s shoulder. “Just lie still. Your motor functions aren’t live, Grace. We just need to ask you a few questions.”

“I will endeavour to answer, Mistress Watt.”

“Very good, Grace. That’s great. Can you tell us what happened to you?”

“Certainly. I was ... I was ... I ... I do not know.”

“What do you mean?”

“I have no access to the memory block. I remember that the Captain instructed me to check in on the Listener, but I have no recollection of finding him. There is nothing. The last thing I can remember is a sound. In the distance.”

“What sound?”

“A voice. I think.”

“What was it saying? Think. Anything you can remember that might help identify the speaker.”

Grace shook her head. “There is nothing. I remember the noise, thinking it was a voice, not voices, just the one. But after

that realisation there is nothing. My memory block has been purged.”

“Male? Female?”

“I do not know,” she said.

“Could that be a side-effect of the electrical charge?”

The engineer shook her head. “Too specific. And way too convenient. She’s been tampered with.”

Devolu knew that meant they had a traitor on board. God help them if it was one of those first-contact cultists. “This stays between us for now,” he told Watt.

She nodded, fully aware of the implications.

“Do what you have to do to get Grace back on her feet. I’ve got to go back upstairs now and make like nothing’s happened.”

“Good luck with that.”

TWELVE

THEY COULDN'T AFFORD to fail. That was the one abiding truth of their mission.

Known Space was vast.

Empty.

Even moving at impossible speeds, there was no way they could ever live to see it all. The mainframe had built a model in which Known Space was like an eye. The pupil at its centre was a great black hole. Beyond that, the iris contained a macrocosm of solar systems spilling out around the core, with filaments of gold around the edge where the iris bled into the white of the eye symbolising the outward ripple of time as the universe expanded ever outwards from the explosive force that had given birth to it.

It was all supposition, of course, but it really was quite beautiful. There was symmetry to it, which gave the impression of meaning. That there could be some sort of meaning behind everything made it so much easier for them to accept their place amongst the stars.

The Listener worked day and night—even though neither conceit existed beyond a memory now—with the mainframe to chart out the course of the signal. But the more he worked on it, the more convinced Hayden became that they would never find the source; worse, though he would never vocalise his fear, he became convinced that they would never encounter another planet with the right bio-mass-chemical make-up capable of sustaining the life of their species. They sent out countless probes to run surface scans and atmospheric tests, but with each one

failing to one degree or another it began to feel like the Goldilocks Zone was a fairy tale, and that any life they encountered out here would be so far from human as to be indistinguishable from monsters.

The signal was strong. It was a guide rope leading them through the stars.

Where there was hope, there was ingenuity.

Every dead end gave them more raw data for the data core, increasing their understanding of the universe and its peculiarities. That in turn helped with their charting of what was still relatively new space in terms of exploration, adding layers of hard facts to telescopic observations and suppositions.

Life on board settled down into easily predictable patterns. Everyone had a well-defined role to play. Even the hum of the engines became bearable, or at least became background noise.

Hayden found himself forming a peculiar bond with the A.I., Grace, but then perhaps it wasn't so unlikely after all—they shared more similarities than differences. He spent most of his days educating Amelia as best he could, and the rest of his time lost in study when she was off doing whatever she did when she was out of his sight. She was a quick study with an unerring ability to recall even the most remote of facts, which she would then often brush by in a rush to tell a bigger, more sweeping story. She had an understanding of how the universe worked that was far beyond his own. It was only ever going to be a matter of time before she surpassed him. That was a day he looked forward to. It felt right, like a father handing the world to his daughter. It was only right that she should be more than him, and that was something to take pride in.

Over the coming weeks their lessons grew shorter and less frequent as Amelia threw herself into her study of the new worlds, using the information gathered by the probes to best predict where they might finally encounter life.

It wasn't until they entered the third month since leaving Unity that Hayden again noticed the twitches in the little finger

of his right hand. It was hard to believe that something so small could symbolise the end of his life, but that's exactly what the twitches meant.

THIRTEEN

THE TRAITOR MOVED silently through the ship. He was just one of them. They nodded to him, traded jokes and promised to catch up on the next shift change. His life was mundane, ordinary, save for the one crucial truth: he wasn't who he said he was. He had to be more careful after the mess with Grace, had to be aware that the ship was always watching even if she didn't necessarily understand what it was she was seeing. He used his position to move about, to be seen everywhere, as a natural part of everything.

And when disaster struck, which it was always going to, he made sure that he was the first to step forward and volunteer to risk everything for the Terella. He knew full well that it was the perfect time to put into action the first stage of his sabotage, because he would be the only man on board with a cast-iron alibi.

The ship fell out of hyperspace. There was an unnerving moment of silence before the sirens kicked in.

Absolute panic took hold all across the bridge as the crew tried to grasp the full implications of what was happening. He watched them. Confusion. Fear. And then, slowly, the realisation dawned that they'd emerged within the gravitational pull of a dying star.

He could have walked away from his mission then and there, leaving the Terella to be drawn remorselessly in toward the dark heart of the star's core as it burned out of existence—tearing a hole in the fabric of space and pulling them through it into ... *nothing*.

Devalo looked lost.

The traitor stared at the readouts in front of him. Something was very, very wrong. It didn't make sense. The numbers identified a breach in the integrity of the FTL engine block. The radiation readings coming from the engine were off the chart.

It was now or never. All in. He leaned forward, putting both hands and all of his weight on the console, then with deft fingers he palmed the small device that had been magnetically secured to its underside. He studied the readings on the console intently, masking the movement with words as he pocketed the device. The simple act of speaking caused Devalo to look away from his hands and towards his face. It was basic misdirection.

"We've got a problem," he deadpanned, half expecting the Captain to come back with, "no shit."

Devalo didn't. He looked at the traitor like he was speaking in tongues, and then shook his head and said, "what?"

He didn't say anything. He simply showed Devalo the readout and let the reality of what the numbers meant sink in. It was always more effective if people came to their own realisations, rather than be led to them.

Devalo scratched at his cheek and chin—a nervous tick. The man had more "tells" than a bad gambler who was feeling the pressure as his bluff was called.

He swore. Just the once. One word. It was more than enough. He knew what the numbers meant.

He turned to the A.I.

"Grace, full diagnostics on the port-side FTL."

"The reactor core has been penetrated, causing a reduced capacity of approximately thirty-seven percent."

"Is that enough to pull away from the star's gravitational field?"

"Unlikely."

"Can we fix it?"

"Not from inside the ship, Master."

"From outside?"

"Access is possible from the outside."

Which wasn't at all the same as saying that they could fix the engine.

"Just tell me what I need to do, Grace." He turned to Devolo. "Keep a level head, Captain. People are going to be looking to you. You're the fear barometer. Don't let them see you're frightened, and they won't be frightened. I'll do what needs to be done out there. And if I fail then we're all screwed anyway, so what's the point in worrying?"

He took his instructions from the machine, and then steeled himself for the space walk.

It took fifteen minutes to suit up. The oxygen tank would give him ninety minutes of breathable air out there. There was precious little margin for error. The mag-boots' lock-and-release mechanism would mean more than half of that time would be swallowed simply by walking to and from the engine, leaving him thirty minutes to carry out any repairs—and all the while they were being drawn remorselessly deeper into the blast zone.

How long did it take a star to die?

Centuries, surely. But that didn't mean they hadn't turned up for its last hour. There was always a last hour.

He tried not to think about it as he strapped the gloves on. He closed his hand around the small remote device he'd palmed, knowing he was going to need to get rid of it while he was out there—and knowing what that meant.

He walked towards the airlock with helmet in hand. The suit was awkward and exaggerated his every movement. The gloves reduced fine motor skills to blunt, stubby gestures. Performing any sort of repair out there was going to be akin to doing brain surgery in mittens.

He carried the case with the arc welder in his left hand.

Several of the crew had come to the walk to wish him luck before he stepped out into the void. They offered pats on the back and words of encouragement as he passed them. In return, he nodded a couple of times. That was it. He was focused. The next ninety minutes could put him forever beyond suspicion or

leave him drifting off into space with empty oxygen tanks. It was an either/or. There was no in between.

Grace held her hand out at the airlock. There was a small comm-link resting in the middle of her palm. "The effective range is five hundred metres. If you find yourself out of range, I hope you remembered your jet pack."

He laughed at that, putting the comm-link in his ear.

"Don't ever change, Gracie. Don't ever change."

"My programming mimics the process of evolution. It is impossible for me not to change."

"Exactly," he grinned. "Okay, let's get this done, shall we?"

Grace punched in the security override on the airlock and was rewarded with the hiss of the vacuum seal breaking.

He put the helmet on and secured it. The sound of the air venting through the safety of the suit was hypnotic, like a metronome keeping time with the music of his lungs.

He closed the airlock behind him, letting the pressure normalise around him before opening the outside door.

"Here goes nothing," he said, taking his first step outside.

It wasn't some long, graceful stride elongated by the lack of gravity. Instead, the magnetic soles on the bottom of his boots clamped down on the ship's hull with jarring force as he lurched forward.

Even with the suit and its layers of insulation, he could feel the sting of the cold against his skin. He flexed his fingers, feeling the reassuring weight of the remote in his palm. He took a moment to just breathe, nothing else. Life had a habit of being lived too fast, but out here, with quite literally nothing for thousands upon thousands of miles all around, it wasn't just humbling: it was invigorating. His presence among the stars was a miracle. It didn't matter whether you believed in grand designs or evolutionary leaps: it was still a miracle and he was determined to savour it.

He lurched forward another ungainly step, and then another, the magnets all that was keeping him from floating off into space. The catch-and-release mechanisms on the magnets were pressure

related, so all he had to do was concentrate on walking. After half a dozen more steps he began to master the laborious movement. It allowed him a moment's luxury to simply drink in the incredible sensation of being out there, with nothing but the flimsy material of the suit separating him from the infinite. It was an ultimately humbling moment. It was only a pity that he couldn't enjoy it.

The comm-link in his ear crackled.

"Problem?"

It was Devolo, watching from the observatory. "Just taking a moment to admire the view."

"You might want to save the sightseeing for the way back. Just saying."

He smiled inside his suit. "Roger that, boss."

He made his way, step by cumbersome step, to the narrow trench that ran between the main bulkhead and the FTL engine. He'd miscalculated. It took him seventeen minutes to get there, leaving him with more time than he'd anticipated to carry out the repairs. He re-factored his calculations, resetting his internal clock. It was vital that he not trigger the remote too late, because it would take time for the repercussions of his betrayal to pan out and he needed to be out here in the one place no one would expect to look. He could feel the eyes of the entire ship on him every step of the way. Good. *Good.*

"What am I looking for?"

"There is an access hatch on the right-hand side, five metres from your current position. You will see a lock-coupling. Twist it to release the cover. The damaged housing is inside. It should be obvious when you see it."

"Obvious in that it'll have steam smoking from it?"

"Presently the damage report is reading radiation levels in excess of fatal exposure," Grace said helpfully.

"I could have lived without knowing that," he said. "Okay, let's see if we can find this handle, then."

He reached the panel a minute later. Twenty minutes had gone since the airlock had closed behind him. He had seventy

minutes' air left. He set the case down, triggering its mag-lock to hold it firmly in place as he wrestled with the twist-and-release coupling. Steam vented out from the cavity behind the steel wall as it opened.

"I don't like the look of this, guys. Are you sure it's going to be a simple weld job?"

"Nothing on a space walk is simple," Grace said, helpfully.

"Let me rephrase that, Grace. Do you think I can do this?"

"Statistically there is a—"

"Lalala I'm not listening," he said, earning a bark of laughter from someone else listening in.

"—chance of success."

"Thanks for that, Gracie. Okay, let's see what we're looking at."

It was a mess. Even without hearing the odds of success against failure, he knew that it was pretty much at the extreme edge of his skill set, but still doable.

With luck.

He glanced over his shoulder back towards the negative-black halo encompassing the dark star, as another surge of what looked like a star-wide sheet of lightning threatened to tear it apart. It cast a dark shadow over his work as he fumbled with the welder, the tool coming perilously close to slipping through his fingers and tumbling away into space, but he brought it back under control.

"Nice of the guys down on that star to put on some fireworks for us," he told the gantry, earning a chuckle from Devolo. No one else said a word. "Okay, focus, focus. Nice and slowly," he told himself.

For the next few minutes it was just him and the damaged engine.

He worked methodically, identifying the problem and making a judgement call on how best to fix it. Another bright flare behind him reminded the traitor that he didn't have time for more than running repairs. First he shot the leak with super-coolant, buying himself a few minutes. He didn't want to think about the

radiation pouring out of the leak. He didn't want to think about how long the suit would effectively protect him from it, because like it or not the answer was "not long enough."

Working in silence now, he took the replacement metal plate and solder from the case, every move made so much more cumbersome because of the huge gloves. He slowly brought the plate into place and started to press down the mix that would be superheated by the welder to seal the plate in place. As a fix it was temporary at best but, given the pull of the dying star on the Terella, temporary was better than the alternative. Once they were well out of harm's way Watt could send an engineering team out here to work out a long term solution.

He fired up the welder and ran the five centimetre long white-hot flame along the seam. The mix bubbled and melted beneath it, becoming one with the plate. He worked the flame around the four sides of the plate, locking it in place.

He knew what he had to do, but the thought of actually doing it terrified him.

He used his thumb to put pressure on the remote nestling in his palm. It was done.

He couldn't take the remote back onto the ship. When they discovered what he'd done, they'd tear the place apart looking for it. He needed to get rid of it, and out here was the obvious place, but it wasn't as if he could just take the glove off. Breaching the integrity of the suit could kill him.

He was banking on Devolo's quick thinking.

If he got this wrong he was a dead man.

He fumbled the welder, the blade slicing through the palm of his right hand and through the remote detonator, and opening a six centimetre gash in his glove.

Screaming, he pushed the ruined remote through the tear with his thumb.

It spun away, the welder beside it.

The mag-locks on the soles of his boots were the only thing that stopped him from keeling over as the blackness of pain

overwhelmed him. There was no blood. The flame had cauterised the wound even as it made it. He couldn't feel his fingers or clench his fist. His hand was ruined.

His grip on consciousness slipped.

With the air being sucked voraciously out of his suit through the tear, every breath was harder than the last. His screams filled the bubble of his helmet as he staggered a lurching step back towards the airlock.

Devolo's voice filled his head through the comm-link.

The words meant nothing.

FOURTEEN

HE SAW GRACE step into the airlock through the black threads of his failing vision.

She was his only hope.

She had no need of oxygen masks or suits to survive the extreme temperatures of a space walk.

Her circuits were directly linked to the mainframe, as were the suit's diagnostics.

She knew exactly how quickly his life force was failing.

The traitor clung tenaciously to consciousness, but there was a limit to how much punishment his body could bear. His ruined hand flapped out, and his body rocked back and forth on the magnetic anchors that locked him to the hull.

He heard Devolo's voice in his head, trying to reassure him, trying to keep him calm.

He watched as the airlock opened and Grace stepped out onto the hull. She moved with the same grace as her name suggested, covering the distance to the FTL engine in half the time it had taken him, but even then it was too long for the traitor.

He surrendered to death long before she reached him.

FIFTEEN

“WE’VE GOT A problem,” Deacon said.

The man was a master of understatement.

The embryonic storage was registering a catastrophic system failure. He’d missed it initially, only noticing it at the first audible alarm and by then it was already too late to save thousands of the viable embryos they’d brought with them from Unity to help repopulate whatever new world they finally found. Thousands of them—the genetic blends of the bright stars of humanity—spoiled. The implications for their future didn’t bear thinking about.

He rattled off an override command on the terminal, trying to force the storage unit into a reboot and bring it back online. Everything executed perfectly, no flaw in the programming, but nothing happened.

He tried three others.

Nothing worked.

His team was panicked, moving around the medlab like headless chickens as they searched blindly for the root cause.

Deacon abandoned the console, opened the bank of fridges and got to work, trying desperately to transfer all of the embryos from the damaged unit to one of the others, only to stop midway as he caught the eye-watering whiff of coolant. He realised it was far worse than he’d imagined.

He looked down at his feet and saw the clear blue liquid puddling around his shoes.

The liquid spilled out the back of the bank of refrigeration units.

Every single one was compromised.

Every single viable embryo they had in storage—and not to be melodramatic about it, but the very future of mankind, he realised sickly—was in jeopardy. If those storage units failed, the embryos would perish.

Deacon froze, paralysed by indecision. They were all looking to him to do something. He tried to think. What the hell was he supposed to do? Without any idea what he was about to say he opened his mouth and barked out an order, not caring who carried it out.

“Get every ice pack and storage container you can from the kitchens.” And when they hesitated: “Go!”

He sounded like he was in charge.

His voice was all they needed to give them hope: he knew what he was doing, he had a plan and this wasn't the disaster they thought it was. Hope was cheap. Hope was for victims.

He was on his hands and knees pulling the trays out of the freezers when he saw the small black lump at the back of the machine. It took him a moment to realise what it was, and when he did he felt sick to his core. It was a shaped charge, one which was detonated remotely. Someone on the ship had deliberately sabotaged the embryos. They had a traitor in their midst. Who could be capable of doing something like this?

Deacon reached in for the remains of the charge, hoping it would dissolve in his fingers as he tried to hold it and so prove to be nothing but shadows. It didn't. He pried it free and held it in the palm of his hand, just staring at it for the longest time.

Then he swore.

Each of the refrigeration units had one of the same coin-sized charges hidden deep within their workings. He had no idea how long they had been in place, and they were all so damaged that there would be no easy way to lift genetic evidence off of them. He double-checked the readouts. As of now, the ambient temperature in the embryonic storage was barely a couple of degrees below room temperature.

Just when he thought it couldn't get any worse a shiver ran through the room, buckling the integrity of the floor. Even before the shiver had passed he heard the deep rumbling toll of a bell. There was a moment, the echo between two heartbeats, when he didn't link the two together in his mind. And then he did.

And then he knew.

SIXTEEN

BUT HE DIDN'T die.

Grace gathered him into her arms and carried his oxygen-deprived body back into the safety of the airlock, and then back down to the medlab. He was distantly aware of the tolling of a bell.

He wasn't heavy in her arms. The android was capable of bearing weights in excess of four hundred kilos before her servos would suffer any strain, but even her robotic body had suffered the debilitating effects of the space walk. Even with the thermal shielding around the hull, the temperatures were down in the negative hundreds—cold enough to cause any mechanisms exposed to it for more than a few seconds to seize up. Diamonds of ice clung to her synthskin. On the Sun side the ship's outer temperatures could surpass desert-levels, depending on their proximity to the blazing stars.

Grace delivered him into Devolo's arms. The Captain took his friend's helmet off and carried him into the medical bay. He lay the traitor down on one of the lab's three beds, unaware of the irony that he was standing in the scene of the traitor's worst crime, begging Deacon to save his life.

He was only vaguely aware of them all standing over him.

"You're a hero, my friend. Because of you we've got a chance." Those were the first words that he was conscious enough to take in.

Devolo looked towards the embryo storage unit, and for just a moment the traitor thought the Captain had put two and two impossibly together and knew what he had done. But he didn't.

He was looking beyond the storage units, through the ship's hull and out into the dark space where the black star was dying.

With the FTL restored, the Terella should have the power to pull free of the gravitational forces drawing her relentlessly down towards the dark spot that was the maelstrom.

They put him on oxygen, flooding his system with a drug-like high as Deacon examined the mess of his hand.

"Not good. You've sliced up all the tendons and shredded the nerves. We're not talking about stitches here."

"What are we talking about?"

"Honestly? I'm surprised it didn't take half of your hand off—and it might have been better if it had."

He didn't say a word. He looked at the empty refrigeration units behind Deacon. "What happened there?"

"We had a situation while you were out playing spaceman."

"That doesn't sound good."

"On a scale of one to ten we're talking screwed."

He didn't say anything.

"Anyway, you we can do something about. So, your call, we can try to reattach the tendons and nerves, which will be a long and slow operation with a tortuous recovery process, or we can just take the whole hand off and go with a prosthetic replacement."

"I'm not sure—"

"We're good. Look at Grace. If you didn't know she was a machine, you'd never guess from looking at her. We have the technology, my friend. We can rebuild you. You'd have total automotive control. Better than ever. Stronger, too."

"Should I be worried that you're working so hard to sell it to me?"

"Okay, no BS. There's a chance you'll never have full mobility. We're good, but we're not miracle workers. And I don't think Devolo wants you off duty for months recovering, so the robot hand is the way to go. And before you ask, no it won't hurt. Much."

SEVENTEEN

CARSON DEVOLO STOOD on the bridge, looking at the slow-burning black threads running through the dying star and the halo that glowed around it.

He was still trying to process Deacon's report. They'd lost all of their embryos. The entire genetically-ensured future of humanity, all wiped out. It was hard to imagine that they had a traitor in the crew. But it shouldn't have been hard: not after what happened with the ark ships and the chaos back in Unity Prime. Lost in the stars, it wasn't impossible to imagine a scenario where it had not been an accident that the first ship had torn free of its elevator and brought the others down. There were enough people who didn't want to see that first contact ever made—was it so impossible to imagine that they might be behind this?

"Bring the engines online, Grace," he said without turning away from the incredible vista.

He would never grow tired of looking at the soul of the universe laid bare.

The readouts on the console were all dangerously close to failure. The stresses on the Terella were intolerable.

Even so, they were witnessing one of the greatest feats of nature at play: the death of a star. It was a once-in-a-lifetime event, and to be this close to it! Even given the danger posed by the gravitational pull, he really didn't want to give the order to leave. Not without seeing the miracle through to the end. In a peculiar way it felt as though he owed it to the star to bear witness to its final moments, to record them in some way so that the star might not be forgotten.

The black threads grew in number as the writhing maelstrom around the star intensified, a secret life of colours on display as the hydrogen burned through the helium layer. It was one thing to know on an academic level that the layers around the star were expanding as fusion occurred, transforming the star into a red giant, and to know that the core was burning through the hydrogen to absorb more and more of the helium layer, burning brightly as it lost mass. And while it burned, its surface temperature scorching, it blazed blue-white into death as the core grew hotter and denser, igniting over and over again. This whole process took time. The star before them had been dying for millions of years, but now it was deep into that final, violent phase, and it was casting off the matter that forms a planetary nebula.

From death comes life.

But if the mass was too great, the entire thing would collapse. It would form a neutron star or a black hole, which in turn could collapse into a supernova.

None of that happened overnight. It wasn't something that took minutes. But all things came to an end.

"Sir, we need to put some distance between ourselves and the collapse. The gravitational forces are increasing steadily, and there's going to come a point when we can't pull clear."

"I know," he said wistfully. "Grace, chart a path out of here."

"Is there anywhere particular you'd like to go, Captain? Or should I surprise you?"

"Chart a course for the source, same as before."

"Which would take us straight through the heart of the dying star," the A.I. pointed out, helpfully.

"Okay, not *exactly* the same. Take us out of here, and pick up the trajectory on the other side."

"Sublight engines engaged, sir," Grace confirmed as the engines' vibrations resonated through the hull. "Charting an orbital course around the core, using the gravitational forces to slingshot us into hyperspace on the other side."

Devollo nodded, only half listening.

He was thinking about the lost embryos and the fact that someone he trusted had betrayed that trust. He'd always believed he was a good judge of people, that he could look at a man and measure him, but the truth was that he was as blind as everyone else when the liar was a skilled one.

"Grace, tell me, can you tell when someone is lying to you?"

The A.I. looked at him, puzzled.

She really was an incredible feat of engineering.

Looking into her eyes, it was impossible to tell the difference between her kind of life—that weird sentience between humanity and machine—and any of the others on board.

"Theoretically yes, by measuring their vital signs and automotive responses to various questions. Why?"

"That's all I wanted to know, thanks Grace. No, wait. It's not all. Can you do that remotely? Or do you need to be in the room with them?"

"I am aware of all of the crew's vital signs through the mainframe, Captain, and can watch through any of the many cameras."

"So that's a 'yes'?"

"Theoretically."

"Good. Then maybe we've got a chance of finding the rat."

EIGHTEEN

DEVOLO MADE HIS rounds over the next few days—a concept that had lost all meaning in the endless night—as they slowly navigated around the dying star. He took his time to talk to everyone on the crew, just a few words here and there, ostensibly to get their spirits up after the near disaster, offering encouragement, often talking about the courage it had taken to do the space walk and keeping them up to date on the spacewalker’s progress. In truth, he was spreading disinformation. To one worker he said that the attack had been made on sanitation; to another, that the attack was on their food supplies, but had failed; and to yet another he told a version of the truth. Each time he looked towards Grace to get a read on the situation.

The traitor stood at his side more often than not, listening to the Captain’s none-too-subtle questions. It took him a while to grasp the fact that Devolo had turned the ship’s A.I. into a walking and talking lie detector.

So close, and yet a couple of parsecs away.

It all changed, though, in a blink of an eye, as they saw one of the gardeners come running breathlessly towards them.

Devolo started to ask one of the questions he’d asked half a dozen times in the last hour alone, but before he could the woman gasped: “I just ... I just... a body... Captain... I just found a body... in the garden.”

“Is it—?” the traitor began, but the woman interrupted before he could finish.

“Her throat’s been cut.” It left little room for doubt.

“Who?”

The woman shook her head. "I don't know. I've never seen her before, and the computer didn't have any record of her."

The traitor saw his chance and grasped it with both hands. He turned to Devolo.

"A stowaway. That explains it." He did his best to remain calm and to mask the mounting sense of excitement he felt from Grace's intrusive scans. "Our saboteur."

Devolo shook his head, not so easily convinced.

"Do we have visuals of what happened?"

"Not that deep into the forest. Whoever did it, they knew what they were doing."

"I really don't like this. We've gone from having a traitor on board to having a murderer. That's quite a leap. Grace, what can you tell me?"

"All sorts, Captain. I am linked to the ship's databases as you know, and I have access to all of the information stored there. You will need to be a little more specific."

"Not helpful, Grace."

"It is as Ensign Cathcart says. The surveillance system does not penetrate the forests of the arboretum sufficiently to offer any visual identification of either suspect or victim."

"There must be cameras monitoring comings and goings. Run through the images and give me a list of names. I want to talk to everyone who has been into the forest in the last twenty four hours."

"Eight crew members entered the arboretum in that period. Facial recognition confirms their identities as Hogarth, Peters, Sharp, Hewerdine, Rice, Collins, Monahan and Wilson, with Monahan and Sharp the last two to enter. Monahan appears to be still in there."

"Then I want to talk to Monahan."

"Now, this is curious," the A.I. said.

"What is?"

"Biometric scans of the deck suggest that Monahan is not alone within the forest, but the readings are not a match for any of the crew, Captain."

“Another stowaway?” the traitor offered, steering their thoughts that way.

“It would appear so,” Grace confirmed.

“Okay, well there we go, a falling-out among whatever those first-contact-phobes are calling themselves these days. That would explain the embryos and the body in the woods.”

“And leaves us with a murderer crawling about in the air ducts and vents of the ship like a rat.”

“We need to deal with this without causing a panic,” Devolo told them. “I’m counting on your discretion.”

“What about the body?”

“Get it to Deacon, he’ll know what to do with it for now. We need to make a plan to flush out our uninvited guest.”

NINETEEN

THE PLAN WAS simple.

Good plans were.

The fewer moving parts and people involved, the less that could go wrong.

Even so, it was obvious that Carson Devolo was worried.

He didn't like leaving anything to chance.

He was the kind of man who didn't just dot i's and cross t's. He drew over them half a dozen times so that ultimately it looked as though they'd been scratched out by a madman. That kind of relentless planning, and the ability to see the eventualities others couldn't, made him the perfect choice to lead the Terella. It also meant that he could look dispassionately at the mess that having a murderous stowaway meant for the mission, and could plot out every worst case scenario and countermeasure that each would demand.

"I'm going to catch this bastard," he told Grace. She didn't argue with him, and for once she didn't offer some light-hearted sarcasm. For the last twenty of the last twenty-two minutes she had been busying herself with astronav computations, working to pinpoint the source of the signal that they were chasing. But that had all stopped two minutes ago as a fresh signal pinged back from one of the many probes they'd dispatched, promising a mixture of oxygen, nitrogen and argon; as well as trace gases like carbon dioxide, neon, helium and methane. It was a mixture that was capable of sustaining life. The A.I. was running all of the tests and scans she knew that the Captain would request, so that she could best answer his every question even as she presented him with what could well be the defining moment of their mission. She was excited. This was a new feeling for her

to process but, as with everything she experienced, it would be assimilated into her each day, adding depth to her personality. Grace was growing, maturing into a woman. She'd raced through the stages of childhood simplicity and teenage questioning into something *more*.

"Captain?"

"Yes, Grace?"

She smiled. She was beginning to like it when he used her name. She knew logically that he didn't care about her beyond her role on the ship, but the way they interacted was so *human* that it allowed her imagination to run unfettered.

"The probes have found what they believe to be a habitable planet deep in the Goldilocks Zone, sir. The first results look very promising, but we won't know for sure without sending a landing party down."

She could see his mind working behind his eyes.

He was ferociously intelligent, and he was already looking for a way to link this new information with his plans to smoke out the traitor in their midst.

"We'll need to assemble a landing party," he said after a moment. "I want Varick down there, and Deacon, and they should take the Listener's protégé, Amelia ..."

"As you wish."

"Any signs that the place is actually populated?"

"There are no signs of life beyond bacterial, sir."

"Then we lie. Let's make it known that there's a primitive people down there. Tell the crew that we're looking for a few volunteers to go down there, and see if we can't smoke out our first-contact infiltrator. But let's be smart about this. Put out the call that we're prepping shuttle bay one, and make sure that shuttle's unguarded. We'll prep bay two for takeoff at the same time. If we're lucky, our stowaway's a creature of habit and will decide to hitch a ride down to the surface. I want you to monitor bay

one for life signs. The minute he turns up, we slam the door and turn the shuttle into a prison.”

The A.I. nodded, silently sending out the prompt to every single comm-link on board. “It is done.”

“You’re an angel,” Devolo told her.

She would have blushed if she had been blessed with the capillary loops and blood to flush through her synthskin.

TWENTY

THE TRAP WAS loaded.

He'd taken measures—and at no little risk to himself, creeping down to bay one, timing his move to the shift changes and expecting to have to relieve one group of guards, only to find the shuttle itself unguarded. He tampered with the control program, inserting a line in the core that would be triggered when the shuttle's payload increased by more than 80 kilos. It would start a countdown of 120 seconds, initiating the launch sequence and disabling the overrides.

All the traitor had to do now was wait. Part of him was furious that the people back home hadn't trusted him to follow through with his mission, and had sent another infiltrator as backup to make sure the job got done. Another part of him was relieved beyond words, because it gave him a fall guy. But he had a problem. He couldn't allow Devolo to get his hands on his replacement, whoever they were. One wrong word from that rat and they would be the death of him. He had no intention of dying. Not for a very long time.

He wouldn't even have to leave his pod. The rat's weight would spring the trap and jettison the shuttle into space, its course locked to go back into the heart of the dying sun. The rat didn't stand a chance.

He lay back in his bunk, ostensibly recovering from Deacon's surgery. In truth he felt fine. Better than fine. The man was a genius. Music pumped into the pod. It was angry music, full of rage and tension. It served its purpose, drowning out his thoughts. He'd rooted his personal terminal into the mainframe, meaning

he could watch the ship's goings on He took almost voyeuristic pleasure from watching the surveillance reports in real time. He was his own plan's failsafe. If it screwed up, if for some reason the shuttle doors didn't slam closed and its engines ignite, he could react faster than Devolo's security chief, Cavanaugh. At a full run, the traitor was seventy-three seconds from shuttle bay one. A lot could happen in seventy-three seconds if you were expecting it, but a normal man would barely even begin to react in that short burst of time. In his experience you didn't need to be the fastest or the smartest, or even the most ruthless, you just needed an edge. In this case his edge was no more complicated than a half-decent head start.

He watched the screen intently.

The mainframe monitored the ambient temperature, the crews' ident signatures as people came and went and, because Grace had been alerted to look for unauthorised access, movement detection. There was no way the stowaway was going to be able to sneak on board the shuttle without being picked up on one of the scanners, even if he had some sort of scrambler blocking the system from picking up his life source. Grace was capable of faster-than-thought computations and had access to all of the thousands of cameras constantly monitoring every inch of the ship. There wasn't an inch of the ship that she couldn't monitor and, unlike a human, her system was capable of monitoring all of them, all of the time. They couldn't so much as crap without Grace knowing.

He noticed the changes in the shuttle's diagnostic readout—the change in the payload, the marginal shift in the chemical balance of the air as the stowaway exhaled dead air—and he shifted the screen to the internal shuttle camera, watching the man frantically looking for a place to hide. It was almost comical. The man rooted around the panels, prying at the edges in an attempt to prise them loose. When they didn't come away, he began rifling through the overhead storage lockers, looking for a space large enough to accommodate him.

And then he stopped moving and stared directly into the camera, almost as though he could see the traitor through the lens. Of course that wasn't what was going on. Rather, the doors had just slammed shut, the bolts ratcheting home as the vacuum seals sucked into place, forming a buffer between the airlock and the interior. The look on the man's face was priceless as the locks fell into place one after the other, and then there was that moment of clarity as he realised his fate was sealed.

The traitor could have let him go in ignorance, but where was the fun in that? He patched his comm-link through to the shuttle.

"You really shouldn't have come here, little brother."

The man turned and turned again, looking for the source of the voice, then said something over the crackling line. The only syllable that came through was: "Ro?"

"You should have trusted me to get it done."

"It wasn't personal."

"I don't believe you. They told you they wanted someone to ride along and you jumped at the opportunity, didn't you?"

"It wasn't like that."

"Then what was it like?"

"You were there. You lived in that place. You know as well as I do that it was doomed. I didn't want to die. I wanted a shot at a new life for us."

"So you didn't volunteer?"

"No."

"I wish I could believe you, but the body in the woods says different."

His brother shook his head desperately. "You've got to believe me."

Ro Varick added video to the feed, letting his bother see his face.

"I don't. That's the thing. And even if I did believe you, it wouldn't change anything. Your fate was sealed the moment you boarded the shuttle."

"You don't have to do this."

"It's already done."

“Please, Ro, we’re in this together. This is our fight. We started it together. Let’s end it together.”

“You killed her, so you don’t deserve mercy.”

Varick killed the connection, and for the next couple of minutes he watched his younger brother scream silently at the screen as he drifted off into the void, doomed.

An alarm klaxon boomed, and Grace’s voice repeated “Unauthorised shuttle launch!” over and over again as all hands scrambled on deck.

Varick rolled off his bunk and put his boots on the floor.

He stretched, working the kinks out of his back and loosening tight muscles before he put his shirt on over his vest and buttoned it to Grace’s dulcet tones. Then he strode out of his quarters, through the enlisted mens’ quarters, and passed the mess hall as he headed back up to the bridge.

Devalo met him halfway, the Captain racing pointlessly down the stairs towards the now empty shuttle bay.

“What’s going on?” Varick asked.

“Our uninvited guest is making a run for it.”

“Can Grace get into the controls?”

“She’s locked out.”

“Well, they won’t get far in the shuttle. It can only recycle the air for seven days and there’s fuel for less. And no food. It’s not like it’s got FTL drives or anything. It’s basically a floating tomb. We’re still out of range of the Goldilocks planet, right? So it’s just a case of which death comes first, starvation or suffocation. I’d pity the poor bastard, but after what he did to the embryo storage I’m all out of fucks to give. Do we have an I.D.?”

Devalo shook his head. “Grace tried to access the on-board cameras but she’s locked out of them, too. He knows what he’s doing.”

If only you knew, Varick thought. “Nothing from the cargo bays or cameras charting his passage from wherever he was hidden?”

“He’s got some sort of distortion field up, screws with the facial recognition.”

“Can she at least get at his course? See if he’s trying to make planetfall?”

“Grace?”

“Captain?” the disembodied voice responded. He still couldn’t get used to the idea that the mainframe was always listening.

“Can you?”

“The shuttle’s last programmed course sets it on a path directly into the heart of the dying star we have just orbited, Captain, away from the planet we have identified for exploration.”

“Suicide run, then,” Varick said.

“Saves us shooting the shuttle down,” Devolo noted.

“The only distinguishing feature is a partial tattoo on the inside of his left wrist,” Grace brought up an image on the nearest screen. It showed Jeremiah Varick punching in a series of numbers on the key lock. The cuff of his shirt had ridden up to reveal crude blue ink renderings of a bird in flight, a fish swimming and a flower in bloom, though the image only captured the flower and the head of the fish. Ro had the same tattoo. His entire family did. It was a link to their cultural heritage, supposedly brought with the family to Unity centuries ago.

“Recognise it?”

Varick thought about lying, but instead pulled back his sleeve.

“Okay, you’ve got my attention, Ro. Want to tell me what’s going on?”

He drew a deep breath. “Grace, do you want to monitor me, make sure I’m telling the truth?”

“That won’t be necessary,” Devolo told the A.I.

“It’s a family crest. The bird in flight, the fish majestically cutting through the water, and the flower blooming. It signifies all that is beautiful in life and creation.”

“So that man in there is related to you?”

Varick shrugged. “I doubt it very much. We’re a fairly prominent family back home. There’s no way one of ours could hide on here without the mainframe recognising their genetic markers.”

Devolò nodded. It made sense.

“So what then?”

“You’re meant to think it’s me,” he said. “Look at the guy, his build, even the shade of his hair. He could be a clone. The tattoo would be the damning piece of evidence. They wanted to fool you into thinking I was your traitor.”

“You were the only person who couldn’t possibly have sabotaged the embryos,” Devolo said.

“I got lucky, but I bet there’s evidence somewhere that leads back to me. I was their fall guy. All I can think is that space walk forced their hand. They realised they’d made a mistake and were thrashing about wildly trying to find a way to pin it on me. Hell, I’m sure if we dig we’ll find evidence to link me to the corpse in the forest, too.”

Devolò shook his head. “I can’t believe how lucky we just got.”

He wasn’t the only one.

Varick relaxed visibly.

“At least we’ve got our answers now,” he said to his friend. “And the traitor’s gone. That’s a positive.”

“It is. And without you ending up in the brig. I’d say that’s a win for the good guys.” It was, but at what cost? His own brother was out there floating in that tin can, just waiting to die. Why couldn’t it have been someone else? Why didn’t they send a stranger after him? Because that wasn’t how they did things. Family meant bonds of blood, which meant emotional triggers and pressure points that could be exploited. Family was always best for that kind of thing. If it came to the ultimate sacrifice, the destruction of the Terella, what better way to force his hand than to have his baby brother there to help him push the metaphorical button and burn it all to the ground? They’d underestimated his will to live. So had he. But more than anything, he realised, he wanted to experience all that this incredible universe had to offer, witness all of the sights it had to show, and savour its wonders laid bare. And that meant finding the source of the signal and, with it, finding the truth they were so frightened of. There was

no one to stop them now. All he had to do was reinvent himself, again, as Ro Varick, Devolo's loyal right hand.

"But what other damage has he done that we don't know about? He tried to take out the FTL drives and he succeeded in destroying the embryos, and all of that was before the probes found signs of life out there. Isn't that what those first-contacters are so frightened of? That there might be life out there?"

"I need to see the body they found in the woods."

"Why?"

"The dead can still talk to us. They've got plenty to say if you know how to speak their language."

"She's with Deacon."

TWENTY ONE

IT WASN'T NECROMANCY. It was cold, hard science, but that didn't change the fact that the dead really could speak to the living.

He joined Deacon in the infirmary. The older man stood over the corpse, the autopsy drill in his hand. The naked body on the slab was a waxy grey, showing weird patterns of lividity where the blood had settled in the hours after her death.

Ro Varick knew her.

It took him a moment to be sure, but as he looked down on the angles of her face again he was able to see through the death mask to the woman she had been—a woman he'd known well, once upon a time. She'd brought him in to the group, introduced him to the first-contacters. She had vouched for him and, for a little while at least, she had loved him.

In his heart of hearts he'd known it was going to be her.

He just hadn't wanted to believe it, not until the proof was irrefutable. And where she was, his brother wouldn't be far away. That was just the way it was.

What was he supposed to do now? Just carry on? Weep for her?

He didn't feel like doing either.

Confess his sins?

No. Not that.

"I know her," he told Deacon.

That got the man's attention. "I take it this is going to be interesting?"

"Depends on your definition of interesting," Varick said. "Her name is Aminah. She was in my group when we volunteered for this mission, but she didn't make the cut."

“So she stowed away instead. I guess that marks her out as persistent.”

“Or desperate,” he said. “At the first sign of trouble her partner killed her and dumped the body before making his escape, alone. That doesn’t strike me as loyal to the cause. You?”

“I’ve long stopped trying to understand these people, Ro. I can’t understand why they’re so frightened of the future.”

“It’s not the future, it’s the unknown and what it represents,” he said, and he knew well what he was talking about. Fear of the unknown was the most potent of all fears. It was easy to feed on and easy to exploit, simply by highlighting the horrors that might occur. They didn’t even have to be worst-case scenarios in order to get the adrenaline pumping. He couldn’t remember what had been his own tipping point, the single whisper that once heard couldn’t be ignored. But he remembered it had been a whisper. Pillow talk. Words breathed huskily into his ear even as he gentled to her touch. He could remember her touch though. Even now he could still feel the lingering sensation of her phantom fingers tracing up the ridges of his chest, bone after bone, to come to rest cupping his cheek as she leaned in to say whatever it was she’d said. It had all seemed so important then. Now, less so.

He looked down at her now with nothing but pity in his heart.

How had it come to this? His ex-lover killed at his brother’s hand. It was a tragedy in the most basic sense, and he was at the heart of the story. “Once upon a time we were more than just friends,” he admitted.

“And now you’ve got my undivided attention, Mister Varick.”

“She was always politically active,” he said, keeping the lie as close to the truth as he could. “She was passionate, full of fire. That’s an attractive quality.”

“If you say so,” the other man said, barely concealing his smirk.

“But it can lead you down a wrong path if you don’t keep it in check. She knew some unsavoury types.”

“I think that’s a given, considering how she ended up,” Deacon said.

“Yes, well, sometimes it’s hard to rein in all of the fire when you’re staring at social injustice day after day, watching the world burn and helpless to stop it.”

“Careful, my friend, you’re starting to sound like one of them.”

He laughed at the idea, but was very careful about what he said next.

“I was one of them. So was my brother.”

“Brother?”

“He was always more idealistic than me. More passionate. More likely to do stupid things to impress a girl.”

“What are you trying to tell me, Varick?”

“I think I know who her partner is. It’s the only thing that makes sense.”

“And who might that be?”

Instead of answering directly, he asked, “Did she have anything on her? Any possessions that might give us a clue as to how they got on board, whether there are more of them and how they reported back to Unity—if they did?”

“Over there,” Deacon nodded towards the jumble of dirt-stained clothing piled up on a second steel work surface.

Varick went through everything carefully. There was nothing of any use. Certainly nothing she might have used to contact the rest of her crazy cult. Which meant it had to be hidden somewhere, unless his brother had had the presence of mind to take it off the ship with him, but he doubted that.

“Do we have any idea where they were hiding out?”

“Most likely in the woods.”

“Okay, I’m going to head down there, see if I’m right. I really don’t want to be.”

“What’s going on, Varick?”

“I told you. Listen. Work it out for yourself.”

As he left he heard Deacon power up the drill, and heard the whine as the bit burrowed through Aminah’s temple.

It was a lonely walk down to the arboretum. The inside of the Terella felt cold in ways it never had before. He was sure

that there was some sort of psychology to it, that it had nothing at all to do with ambient temperatures or anything else, but everything to do with him finally feeling alone out there. He nodded to a couple of crew members as he passed them, not engaging in conversation. There had to be a way for Aminah and Jeremiah to communicate with Unity. It would almost certainly be one-way communication, with an agreed final communique along the lines of “job done” before they sabotaged the ship once and for all.

He entered the trees.

This place always gave him the creeps. The existence of an entire ecosystem inside the ship was unnatural—which was ironic given it was the most natural thing about the ship’s cargoes. He traced his fingertips across the rough bark of the trees as he wove a path between them. Small coins of light were scattered across the path in front of him. They glittered gold with promise. He followed them for no other reason than that they took him deeper into the woods. In fairy tales it was always inside the woods where bad things happened, where the monsters dwelt. They were primeval. There was a link back to the hindbrain’s fears of the unknown and the dark. It didn’t surprise him that humanity’s ancestors had worshipped the woods. It made the woods a good place for the first-contacters to hide.

He tried to think like his brother—where would Jeremiah have made his lair? Not in the dirt, he realised, thinking about how much risk that entailed, but up in the canopy. People didn’t look up. Even when they were tending to the flora, they were obsessed with looking down, so he had a vast acreage of possibilities up above his head and a limited window of opportunity to find what he was looking for.

He decided to begin his search in the vicinity of the murder site, working his way out from there in concentric circles. He looked at the tree trunks for signs of scuffing and the like where they’d been climbed, and for any other clues that might lead to wherever his little brother had been hiding.

It didn't take long to find exactly what he was looking for: a thick-boled oak with several flakes of bark missing where boots had torn it away. He looked up. It was impossible to see what was up there because of the canopy of leaves. He had no choice but to climb. The ascent was easier than expected. Around ten feet off the ground his fingers found cuts that had been sliced into the wood to make hand and footholds. Using them, he scaled the tree, pushing the leaves aside to reveal a small platform. There were discarded clothes, shrinkwraps from rations and other rubbish on the platform, making it obvious that he'd found their hideout. Instead of sky above him there was steel.

Varick rummaged through the junk, discarding clothing and waste quickly, until he found the odd thing out: a small magnesium-lined black box. It was some sort of recorder, designed to survive impact and temperature extremes. He pried it open with a thumbnail. Inside, he found a single key-stroke entry like some sort of primitive ticker-tape device. The inside of the lid was lined with paper. He unfolded the sheets of paper and read the list of messages they'd sent back to Unity. One by one, the messages betrayed everything he had done to the Terella, and they included his name. He couldn't allow the box to fall into the hands of Devolo if he wanted to reinvent himself as one of the good guys here.

The final sheet included a cypher.

He took a moment, considering what he should send as the last message from the Terella, before deciding upon the simplest: Last transmission. Engines destroyed. Mission failure. The Terella will die in space. No contact made.

He tapped out each letter in the sequence and then stuffed the sheets of paper one at a time into his mouth, chewing and swallowing the last evidence of his treachery.

He buried the box before leaving the woods.

TWENTY TWO

THEY HAD SENT probes through ice geysers, landed robots on distant worlds and charted the depths of Known Space looking for something to suggest there might be life out there. Always, at every eventuality, they had found nothing. Not so much as a microbe. Until today, Hayden Quinn had begun to believe that the reason they couldn't find life out there wasn't because it didn't exist, but because it had already died out. Centuries upon centuries was more than time enough for life to flourish, to crawl out of the primordial stew; it was time enough for it to flounder on the beach, trapped in evolutionary failure, and to die, flapping about desperately.

But now they had the signal. It was irrefutable proof that life had flourished somewhere else, developing a technological understanding and finally becoming advanced enough to reach out in search of other life. It was the answer to so many prayers. But Quinn had begun to think differently about it. The signal was ancient. It travelled endlessly through the galaxy. He didn't know how long it had been out there, but if the source was beyond the fringes of Known Space then it wasn't just old, it was older than the colonies on Unity itself. He kept his suspicions to himself, but there was no escaping the fact that by the time he had finally heard the signal it could have been so old that the species who sent it was nothing more than star dust when it was finally heard.

He spent every waking moment in the Library, studying the book of worlds, examining the constellations and solar systems, and looking for subtle clues of life lost; not clues of giant dinosaur skeletons, but of fossilised microbes and remnants of what

might once have been life. More distressing was the fact that he found proof dozens of times of life failing to take hold, which left him daring to ask if humanity was an evolutionary freak.

And then Grace had reported the probes' findings: life, basic, yes, but still life; and an atmosphere capable of supporting it. The old man had volunteered to go planet-side with the others, knowing his presence would slow them down, but arguing that his anthropological and linguistic skills made him irreplaceable. Devolo had agreed, but compromised with his chief security officer's concerns and ordered Amelia to chaperone the old man. Danika Watt had been working on a solution that would make him less of a liability down there.

Leaning on Amelia, Quinn visited Watt in the engineering lab.

It was impossible not to marvel at some of the creations the woman was working on. On the far side of the vast laboratory floor stood a huge exoskeletal construct that looked like a crude rendering of a giant robot drawn by a child.

"You like? She's an All-Terrain Armoured Frame," Watt said. "We call her a second skin because that's just easier. We've been working on her for a while. The idea, eventually, is to develop a neural link so the pilot can sit in the safety of a rig up here, while she goes plant-side, operating the second skin remotely. No need for breathable atmosphere: she's capable of functioning in any temperature, with incredible tolerance for heat and cold. She's a game changer. Or she will be. But right now she's just the frame. Give us six months and we'll have her up and running at her full potential, though. Why don't you try her on for size, old man?"

Amelia helped him cross the room, each step seeming to take an agonising effort. He was dying. He knew it. And he knew that he'd never have the time to teach the girl everything he knew, but that only made him all the more determined to make planetfall with the landing crew and experience life on a new world, to be part of the great exploration first-hand, no matter how briefly. She helped him into the cage—that was how he thought of it; not as a second skin, but as a cage for his dying body.

The centre of the cage had two joysticks that controlled its movement. They took a bit of getting used to, but within an hour the old man was proficient enough to have mastered the basics, including the pincers that functioned as opposable thumbs.

“There’s an autopilot feature to handle the legs. You can steer it with subtle changes in your bodyweight and your position in the frame to make the second skin turn to the left or right. She’s pretty intuitive. Give it a go.”

His first steps were awkward and juddering, the cage moving like an ungainly baby beneath him as he struggled to master the art of not falling over. As with the manual dexterity practice earlier, it didn’t take long to get to grips with the basics of walking.

“You’re a natural,” Watt said, as he returned from a circuit of the lab. She offered him a warm smile as well as her hand to help him out of the cage.

“I wouldn’t go that far,” Hayden said, taking it.

He clambered down awkwardly.

“Nonsense. Two hours’ practice and you’re good to go. Just don’t bring her back all beaten up. She’s worth a small fortune in terms of man hours and research, but she’s worth much more than that to me. I’ve poured my life into her. I really don’t want to have to rebuild her because you didn’t watch where you were going,” she was smiling as she gently chided him, but he could tell she was serious. “Not so much as a scratch, okay?”

“I promise.”

TWENTY THREE

THE FRONT LINE of the landing party comprised of Devolo, Varick, Quinn in his cage, and his protégé, Amelia, at his side. Deacon walked a few steps behind them, not trusting the machine, with Cavanaugh the security chief and Danika Watt bringing up the rear. The seven of them had the combined skill sets to cope with every eventuality the new world could throw at them.

The first thing Varick noticed was the air quality. It was different. It was fresh in a way that the air on board the Terella wasn't, even though it was filtered through every manner of purifier. Each breath he took on the planet stung with the heady freshness of it as it filled his lungs. It felt as though he could get drunk—or high—on it, no other stimulants needed. Then there were the aromas, each fragrance so much richer and headier than he remembered them ever being back on Unity. It was sensual in the most literal meaning of the word. Even something as commonplace as the grass crushed beneath their feet conjured a sensory overload. Everything was just so much more intense. It made his skin crawl.

The view was no less spectacular. They had set down on a meadow at the edge of a crystal blue glacial stream. The stream cut through the frosted meadow on the way to a deeper lake, and a crust of ice glittered on the bank at their feet. Snowcapped peaks provided shelter on three sides, cradling the valley in their shadow. Where the mountain ranges weren't white, the stone stood out in stark contrast. Varick could hear the rush of a waterfall somewhere in the distance. There was nothing, no buildings,

as far as the eye could see; it was an entire landscape filled with nothing. It couldn't have been more different from the urban sprawl of Unity if it had been consciously designed that way. They were walking across ground that had never been trodden. Each new step was a great adventure.

But it wasn't perfect, no matter how much they might have wanted it to be.

The old man nearly fell as a huge rumble seemed to turn the rock beneath them into water for two long seconds.

"Could you imagine living here?" Devolo said, breaking the silence.

Varick thought about it for a moment. It would be a simple life. One of hunting, gathering and simply existing until you didn't anymore. No, he couldn't imagine it.

He shook his head.

"The place gives me the creeps," he admitted. "It's too ... empty. And I really don't like the way the ground shivers every mile or so, like you can't trust it. Not sure I'd fancy spending prolonged periods of time here."

That earned a chuckle from behind him. He turned to see the Listener lumbering along in his cage, a stupid grin plastered across his heavily wrinkled face as he lurched forward, step after ungainly step.

"Despite the rumbling tectonics, it reminds me of home," Quinn said. "Or at least what home could have been if we'd let it. Without all of the factories and machines, the tenements and skyscrapers."

"Without us, in other words," Danika Watt said. "Meaning if we made this our new home, we'd be damning it to the same fate."

"Aren't you a cheery soul?" Varick said, but he knew exactly what she meant. It was the human condition. Conquer, consume and abandon.

"Why don't you run the necessary tests," Devolo told Watt, hunkering down and reaching out over the ice to where the water flowed to scoop up a mouthful of it to soak his lips.

"I wouldn't do that if I were you," the old man said from the safety of his cage. "No matter how clean it looks, you've got no idea what's living in there."

"Another cheery thought," Devolo said, drying his lips with the back of his hand. "But let's look at the positives: any sort of bacteria would mean we've found a planet capable of sustaining life. That's a win."

"You have an interesting way of looking at the world, Captain," Quinn told him.

They ran countless tests, taking twice as many samples as necessary of flora and fauna to take back to the ship so that they might run more sophisticated tests, but it was looking good.

"Grace," Devolo said into his comm-link, "double-check the readings, I want to be sure we're alone down here."

"As you wish, Captain," her voice echoed in all of their ears. A moment later she confirmed that they were the only people on the entire world. It was a peculiar feeling, to say the least.

Varick led them through the landscape. When he'd volunteered for the mission, the idea of experiencing new worlds had been the furthest thing from his mind. But now, walking through the reality of it, it was everything. More than he could ever have anticipated. And to think that he had almost damned them all. He breathed in the virgin air, deeply, holding it in his lungs, savouring it. But could he live here? Could he lay down new roots and provide the foundations of a new society—Unity Two? Or was Watt right? Would they be damning this world to repeat the histories of the two broken worlds their people had left behind them, in their rush to consume those worlds' natural resources?

Of course she was right, he thought bitterly. "What do you think, Listener?"

"About what?" the old man asked.

"Life, the universe, everything. As far as we know we're the first human beings to set foot on another world in forever. Shouldn't we do something to mark the event? Some sort of ceremony?"

Quinn considered it for a moment and then spoke.

“It is traditional, I think, to plant a flag to show that we have been here, and to lay claim to the territory.”

The ground shuddered again. For a moment the horizon itself seemed to ripple as the quake rushed away from them.

“Because the next people here are guaranteed to land right by our flag and know what it means,” Watt said, dismissively.

“Logistics aside, I like the idea,” Devolo said. He pointed up towards a point overlooking the far side of the lake. “Up there works.”

They walked slowly, skirting the edge of the lake. The frost around the perimeter was a crazy fractal pattern of cracks that seemed almost to replicate the chaos of the universe itself: grand and not-so-grand designs, rendered in ice. It took three hours to circle around to the peak, and six more to climb it, but that time wasn't wasted. Varick drank in the sheer beauty of the place, and found himself staring at what felt like the end of the world. The lake dropped down a huge shelf, creating a waterfall one hundred metres tall—hence the rush of water and deafening cascade that accompanied the water spilling down the rock face.

He dropped into an easy conversation with the Listener. It was always strange to talk with the old man. He took everything you said quite literally, and offered no sense of imagination.

Varick wanted to say, “Look at this place, just look around you, and try to imagine what it would be like to live here.”

He knew that if he did, the old man would simply shrug in his metal cage and say something like, “Cold, wet. I wouldn't last a week.”

Which was true, of course. As things stood, they'd all die of exposure if they didn't seek shelter or return to the ship before nightfall, but where was the poetry in that? How could you look at something as wondrous as a new world and only see the mundane death offered by the ice?

It was a demanding walk. He felt every hard-won metre in his bones. They stopped talking after a while. Heads down, they

marched on. The cold burned in his lungs. The breath that left his mouth turned into ice in his stubble. He looked up at the Sun, only to see it nearing the horizon before them. It was a good five degrees colder now than it had been when they'd set out, and the wind had changed. There was an edge to it. It cut through their suits, biting.

Varick kept his head down.

The only one of the landing crew who moved unaffected by the changing weather and the hardship of the hike was Quinn. The old man's cage just kept on walking forward at a steady pace.

"It's almost a shame we have to leave here," Varick said, after a while. "But I don't mind admitting I'm fascinated by this signal we're chasing and what it might mean. How does it feel to have found the one thing that might just change the fate of humanity for all time?"

Beside him, the old man kept on walking, his frame coming dangerously close to the edge where the water fell.

He didn't answer.

"Watch yourself there, old man," Varick warned, but the Listener continued to walk on.

He noticed the odd angle at which the old man's head hung, and that the Listener had given no sign of hearing his warning—never mind heeding it. Suddenly, he understood.

There was nothing he could do to stop the Listener from walking over the edge and joining with the waterfall on the way down. He was already dead. Amelia screamed, running headlong after him. She would have gone over the edge, too, if Varick hadn't whipped out a hand to catch her collar and haul her back onto safe ground. She didn't stop screaming, though eventually the screams became choking sobs that racked her entire body as he still held onto her.

No one said a word.

They were each trying to process what had just happened in their own way.

He was about to suggest that they bury the old man in the shadow of the mountain, planting him in place of the flag he'd

suggested. But Watt put paid to that idea when she approached the edge cautiously, and sadly, simply observed: “There’s nothing left.”

Varick knew what she meant without looking. Between the fall, the cage itself and the relentless force of the waterfall, they’d be reduced to quite literally picking up the pieces, should they even be able to find a way down.

The Listener was the first of them to die on a new world. It was only fitting that his body be left to degrade into its constituent parts, nourishing the land he’d travelled so far to see.

“We’re done here,” Carson Devolo said. “This isn’t our new home. No matter how much we might want it to be.” He’d known that since the first earthquake, but they’d had a duty to explore. “We set out with one aim: to find the source of the signal. That’s what we’re going to do. We can’t afford to fail. Too many people are counting on us for that to happen.”

No one argued with him.

PART 3

FIRST CONTACT

TWENTY FOUR

FIRST CONTACT WASN'T what any of them had expected.

Grace's scanners picked up a second short-range beacon. The A.I. identified the signal as alien—or, at least, non-human—with none of the languages in her immense database offering any sort of coherent translation. It was only the frequency that suggested that the ship broadcasting the signal was in distress.

"Two choices," Danika Watt said. "Investigate or ignore. Your call."

Devalo didn't look like a man who wanted to make that kind of decision.

"Any life forms on board?" he asked Grace.

"I'm not psychic, Captain," the A.I. said. "Nor am I a fortune teller. Until we're in range to confirm one way or the other, we must assume that both possibilities exist: there are people that need our help, or there are people who are beyond our help."

"Thanks, Grace. How far away are we?"

"The signal is within two days of our current location, but it involves a detour from our current trajectory."

"What have we got to lose?" Devalo said, thinking aloud.

The A.I. was only too happy to detail everything they stood to lose, beginning at the top with their lives and, of course, the Terella itself, should the beacon be a lure to draw them into a trap. She worked her way slowly down the list.

The Captain interrupted her before she was even halfway through what felt like a never-ending list.

"I didn't actually want you to answer that one, Grace. Sometimes I like to leave the bad stuff to my imagination."

She seemed to struggle with that for a moment. It wasn't difficult to read her mind: *Why ask a question you don't want the answer to?* "My apologies, Captain. I naturally assumed you were asking for a comprehensive list of everything we do actually stand to lose by investigating the ship. I have now noted that you are not always interested in the truth."

"The thing is, even if it is a trap, we've got to go look. This is what we're here for. Life. Proof that there's someone else out there and that we're not alone in this big, sucking black emptiness of space. Set a course for the ship. I want to know exactly what we're facing long before we get there, so send a probe ahead of us."

"As you wish," the A.I. said.

He felt the slight course alteration as the ship came around by degrees.

"Get Varick and Cavanaugh to gather a team of ten men for boarding."

"Of course."

"Make the necessary course adjustments."

"According to my matrix, it is reasonable to calculate that seven out of ten interstellar civilisations are conquered or utterly wiped out less than a thousand cycles after leaving their home system. That alone makes this new encounter a mathematical miracle. Impressive is it not?"

"I don't want to think about the numbers, Grace, if it's all the same to you."

He left Grace on the bridge and went down to the Library.

Amelia had stopped mixing with the rest of the crew after the death of her mentor, taking refuge in the books he had so loved. Devolo knocked quietly on the door, waiting for permission to enter. The first thing that struck him as the door slid silently open was the musty, locked-in smell of both the room and Amelia herself. She looked up at him through the blue light of one of the world book projections. She had taken the old man's death badly. She ran her fingers through her tangled hair. It was beginning to clump into dreadlocks. She rubbed at her face.

“How long is it since you last slept?” Devolo asked.

She considered it for a moment, genuinely confused by the question, then shrugged. “Properly? Not since planetfall. In fits and starts, I don’t know maybe thirty hours ago, for an hour. Before then, maybe another couple of hours over the previous twenty-four.”

“You can’t go on like that.”

Again, she shrugged. “There’s so much I don’t know. So much we lost with Quinn. I just feel so ... useless.”

“Exhausting yourself isn’t going to help with that. You’re a smart kid, you *know* that your brain isn’t even functioning at fifty percent right now. You might be looking at all of this stuff, but you’re not taking it in. You need to sleep.”

“Is that an order, Captain?”

“Damn right it is. I’m going to need you on the top of your game, kiddo. You’re *it* now. Not the protégé, you’re the real deal, Amelia. Time to stand up and show the rest of this mob what you’re made of. I’ve got absolute faith in you. Grace has found a ship. We’re going to rendezvous with it. I want you on the boarding party. You’re the only one of us who has any sort of expertise when it comes to understanding the civilisation behind the technology—assuming we’re not just looking at some lost ark from the first evacuation of Earth, that is, but even then we’d be clueless.”

“I don’t—”

“Don’t try to second guess yourself. You’re the best we’ve got. That’s the reality of the situation. Sure, the old man knew more than you, and he hadn’t come close to finishing your education, but you’re what we’ve got—not him. We’re counting on you here. We’re going in blind. We have absolutely no idea what we might find on there, or how to interpret it beyond ‘they’re smart enough to achieve space travel.’ Everything else, anything *approaching* understanding, is on you.”

“No pressure then,” Amelia said, mustering a smile.

“None whatsoever,” he agreed.

“I’m not ready.”

“None of us ever are. I wasn’t ready to captain a ship, to have all of these lives in my hands, but you step up. It’s what you do.”

“And if I get it wrong?”

“We deal with it. You will just cripple yourself if you obsess about screwing up before we even get out there, kiddo. I’ve got faith in you. Have a bit of faith in yourself. You wouldn’t be here if we didn’t think you had the right stuff. Do it for yourself. And if that’s not enough, do it for the old man. Make him proud.”

She pushed herself out of the chair and killed the projection. “A ship?”

“Derelict. No idea how long it’s been floating around out here, or if there’s anything salvageable on it, but yes. A ship. Proof. Finally.”

“What do we know about it? Anything?” she asked.

“We’ve dispatched short-range probes. It’s too soon for any concrete results beyond what we’ve picked up with the distress call.”

“Grace?” Devolo said, calling up the mainframe. “Play the signal so Amelia can hear it. Maybe she can pick something out that we’ve missed.”

“Of course, Captain.” The weird signal filled the Library.

Amelia listened intently and then pulled up another projection, twisting and turning it with her hands as though her fingers playing with the image was what was making the sounds.

“What are you thinking?”

“Do we have an image of the ship? Any sort of visual contact?”

“We have been able to distinguish a geometric pattern based upon sonic resistance,” the mainframe confirmed.

“Let me see it,” Devolo said, his request conjuring up a second projection between them.

It was vast, seeming to stretch on and on. It had obvious laser cannons and weapon turrets, marking it as a battleship or a transporter—something that would have to protect itself. It also had a docking bay in the long expanse of the midsection and coloured markings on its hull.

“What are you thinking?” Devolo asked again.

“I don’t know. There’s something about the sound that’s so alien, and yet so incredibly familiar. Listen to it again.”

He did. Whatever it was she heard, he didn’t hear it.

He said as much.

“Listen, stop expecting to hear words, or anything even vaguely distinguishable as what we think of as language, and listen on a more animalistic level. Listen to the sounds within the pops and clicks and hisses. What does it sound like?”

He shook his head, still not hearing it.

“Listen,” she said again. “There are two distinct sounds here, a voice and an alarm, but we’re hearing them as one. Grace, can you isolate the voice from the siren using pitch and frequency modulation? And then amplify the voice?”

Separated, the signal was no more intelligible, but it was quite obvious now that Amelia was right: they were listening to two blended sounds—almost like a panicked Captain shouting over the shrill alarms of his ship going down. And there was something eerily familiar about one of the two filtered sounds. It took him another two cycles to place it. It was a harsh, guttural hiss, with an occasional—almost ethereal—hoot punctuating the sibilance. He could feel the sound more than hear it, he realised, as it vibrated through his bones.

“Can you feel it? The vibration?” she asked, and Devolo nodded.

“The sound isn’t the message,” she said. “The vibration is. The sound is just a relic left over from it. We can hear it, but they can’t. That’s not how they communicate.”

“You know who we’re dealing with?”

“Not who, but what,” she said. She changed the projection, bringing up a fluid capture of evolution. It showed the progression from single cells to the fish that had crawled out of the primordial soup to flap around on the shore as it struggled to breathe and adapt, sprouting legs and slowly learning to walk. “We always assume that evolution will progress along similar lines anywhere life successfully takes hold, with the same species

emerging as dominant, but what if we're wrong? What if the fish that crawls out of the sea isn't a fish at all, but a reptile, and instead of evolving into a mammal it remains reptilian? Feel the vibration of the distress call in your bones and think *differently*. What species communicates primarily through vibration and resonance?"

Before he could answer, she said, "Lizards. The sounds geckos and iguanas make tend to be side effects of their true tongues. Almost every other species of lizard communicates in vibration, colour or posture. It's non-verbal, and therefore alien to us. What do you *feel* when you listen to that message now, knowing that it's trying to convey a message directly to your bones?"

He focused on the sensation gripping his frame, the tightness around his ribs and the ripple sinking down towards his gut. He closed his eyes. "Fear," he said.

She nodded. "I can feel it too."

"But what does it mean?"

"We won't know until we get on board, but if it was enough to frighten them, I think we'd do well to be afraid," she said.

He was quiet for a moment, considering the implications of her words.

He nodded once. "He'd be proud of you. I know I am. But that order still stands. Get some sleep. We're going to need you at the top of your game."

She shook her head. "There's so much knowledge in here that could prove useful: divergent evolutionary traits, the kind of physiological aspects we'd be up against with a reptilian society, anthropological data—even archaeoastronomy."

"I'm serious," Devolo said, his tone of voice changing to emphasise just how serious he was. "You can study later. There will be time before we dock with the ship. You're part of a team now. It's not just you and the old man against the world. When you set foot on that alien vessel, nine other people are going to depend upon you being sharp. Sleep deprivation is dangerous to *them*. Do you know what happens to the mind when it isn't allowed to

rest? We're not just talking about being sluggish, or not reacting quickly enough to danger. The mind becomes prone to hallucinations. Pink elephants might be funny, but who's to say what you might hallucinate when stress and an alien environment are both factored in? I don't know, and frankly I'm not prepared to take the risk. Now you sleep. And wash. Not to put too fine a point on it, but you stink."

"I can't," she said, and he finally understood that she was fighting her own demons—the sort that only came out when she closed her eyes.

"Then I'll have Deacon sedate you. One way or another, you are going to rest."

"Please," she said.

He didn't know whether she was begging him to drug her or begging him not to.

TWENTY FIVE

THE DEAD SHIP was immense, blind, and yet it still felt incredibly hostile.

“There are no signs of life,” Grace said.

“Adapt the scan,” Devolo said. “Assume we’re looking for cold-blooded creatures, not warm-blooded ones.”

“The results are the same, Captain,” the A.I. said.

“Okay. Good. That’s good.” He turned to his security chief. “Your people ready?”

Cavanaugh nodded. The man was in full combat armour, clutching a locked-and-loaded compact carbine pulse gun. The squat weapon was capable of a staggering two hundred plasma bursts in a minute, effectively laying waste to anything and everything in its range when fired. It was a weapon of shock and awe—or thud and blunder, as the grunts joked. It was death in the hands of someone like Cavanaugh, plain and simple.

Cavanaugh had selected six men for the expedition. Each looked like cloned versions of the man himself, right down to the valour medals enamelled on their armour. Their visors were pushed back, showing hard faces marked with scars and stubble, and eyes familiar with the worst that humanity had to offer. These were hard men, used to brutality. They were the kind of men you’d trust your life with, Devolo thought as he sized them up.

“I’m sending Amelia with you,” he saw Cavanaugh move to interrupt him and headed him off. “And before any of you think about complaining, it’s my call. She’s smart. She’s the one who worked out what we’re looking at here. Most of all, no matter

how you've categorised her place on this mission, she isn't a child. Not anymore. She's one of us. Listen to her on there. And keep her safe."

"Aye, Captain," Cavanaugh said, clearly not happy with babysitting duty but professional enough to keep his feelings to himself.

"Keep your comm-links active. Be ready to bug out at the first sign of trouble. No heroics. Okay?"

"Expecting company?"

Devolò shook his head. "Just planning for the worst. We don't want any surprises. In and out. Assess the situation. Once we've confirmed what we're dealing with, we'll take it from there."

"You heard the man. Let's pick up our precious cargo on the way down to the shuttle bay and then take a look-see."

Cavanaugh led his team away, leaving Devolo on the bridge with the android. "I've got a bad feeling about all this," he admitted.

"Given an infinite universe and four billion years of evolutionary success, the probability of stumbling across an abandoned ship is indeed infinitesimal," she agreed.

"And yet that is exactly what we have done."

"Which makes it a mathematical improbability on the scale of a miracle."

"Or a trap."

"There is always that option," the A.I. agreed, a little too cheerfully for his liking.

He really needed to talk to engineering about toning down Grace's chirpiness.

TWENTY SIX

CAVANAUGH WAS EDGY. He'd never admit it out loud, but anyone with an inkling about body language would have been able to read it on him. He didn't like the way Amelia kept looking at him—like she knew.

The team were fully suited up. They had their breathing apparatus on, the steady inhale, valve-clasp, exhale and valve-release rhythm filling their helmets.

He clenched and unclenched his fist, staring straight ahead.

He heard the couplings lock in with a series of heavy *thunks* as anchor bolts shot into place.

He activated visuals from the helmet cam, the glare of the flashlight forming a huge circle on the door in front of him.

His breathing slowed as the seals broke with a laboured hiss on the airlock door in front of him before the door slowly opened. "Follow my lead," he said, his voice filling their helmets.

Raising his right hand, he gestured for the team to move out. They went with two at the front, two at the back and two in the middle, forming a cordon around Amelia, who looked fiercely determined in the oversized suit. She did as she was told, though, and without question, falling into formation as they boarded the alien vessel.

The visuals came up, indicating air samples and core temperature. There was no breathable air inside the docking area. Internal temps peaked at minus forty. It was beyond cold. It was cold and dead.

Taking point, Cavanaugh was the first to set foot on the ghost ship. It was not unlike the Terella on many levels: steel

works, ducts, pipes, endless corridors with burnished and tarnished metal stretching as far as the eye could see, warning signs, operating instructions, safety systems, sprinklers and hydrants, and everything else imaginable. But it was darker, colder, and dead inside. There were traces of mould that had calcified in place of rust. He reached out to touch the nearest wall. The wall *thrummed* against his fingertips. It was as if the ship was breathing around him.

“I thought you said there were no signs of life?” he said into the mic, knowing the accusation would find its way up to the bridge. “This whole thing feels like it is alive.”

“Negative,” Grace piped up in his ear-piece. “There are no detectable signs of organic life, Master Cavanaugh.”

“Are you sure about that, Grace?” he said, feeling the walls vibrate around him. “Because it sure feels like we’re walking into the belly of the beast here.”

“Affirmative. There is no organic life on the ship. All spores have long since died out. All you see are the remnants of life that’s long gone.”

“So why is it vibrating? Do me a favour: run a check for any sort of anomalous energy emissions.”

It took a moment, but the scan came back clean.

He concentrated on the pulsing sensation through his glove. It was more than that, he realised after a moment. There was a subsonic hum to it, too. The entire ship was vibrating. He said as much.

Amelia nodded. “It’s not as dead as it seems. There’s an emergency power generator somewhere maintaining gravity as if there was still a crew to need it, and it’s also broadcasting the distress signal. The vibration is a component level of the signal, communicating with different listeners in different ways. It isn’t an alarm like we’re used to—it’s not in English or any comparable language. It’s not even a human tongue. The signal is patterned on the reptilian nature of communication; they use vibrations, and any sound is just a byproduct of those oscillations. Yes, it’s producing

electromagnetic waves, that's what we're hearing, but there's so much more to it than that. Feel the underlying message."

"That's some freaky shit," he said, but there was an edge of admiration to his voice. "Okay, so we've got a talking ship, but no anomalous energy signals and no life signs. It's just vibrating away to itself while everything else slowly dies."

He advanced slowly, listening for the slightest out-of-place sound.

Shadows gathered around the fringes of the flashlight's beam as it roved around the corridor before him, constantly moving as he shifted his gaze. His breathing was loud in his ears, feeding back from the mic into his ear-piece.

The corridor ahead branched into two.

Neither looked more promising than the other.

"I really don't like this."

They ventured deeper into the ship. It was the same in every corridor: that eerie vibration running through the walls, no lights and no other sounds save the echo of their passage. The silence was eerie. It meant that every sound they made was exaggerated.

He gestured for the team to split up, taking four of them—including Amelia—up to the next level, while the other three continued to explore down there. "I want to hear everything you see. Likewise, we'll check in with you. Anything out of the ordinary, anything just plain creepy or weird, I want to hear about it. Keep the channel open."

"It's all creepy and weird."

The chatter after that was on-point. They traded descriptions of the internal workings of the ship, trying to work out what purpose each room might have served, but they struggled to think like an alien species more often than not and came away clueless.

At least, they were clueless until Cavanaugh entered the death room.

TWENTY SEVEN

DEATH ROOMS ALL have the same atmosphere regardless of race, creed, colour, or even species and genetic makeup.

Death is the great leveller.

The shadows beyond their flashlight beams hid the worst of the room's secrets. It was a mercy they couldn't smell anything through the ventilation masks of their helmets. As they moved deeper into the room, Cavanaugh began to pick out the silhouettes of furniture, chairs, consoles and screens, each design almost familiar and yet ergonomically very different to anything on the Terella. And then he saw the bones. He stopped dead, raising a hand to keep the others back while he played the flashlight over the scene.

"We've got something down here," the voice of one of his men said in his ear. "Looks like the crew. Or what's left of them."

"I'm counting seven sets of skeletal remains here," Cavanaugh reported back.

"Likewise, but these things, the bones ... are you guys seeing what we're seeing? I mean ... I know she said they weren't human, but this thing ... I thought it was a triped for a while there, but it's some sort of *tail*."

Cavanaugh had just seen the same thing: the division of the vertebrae within the pelvis that didn't end at the vestigial tail of the coccyx, but instead continued in a ladder of bones all the way down to the floor. "I see it," he said. "Man ... I've seen a lot of shit, but this ... it's freaky. I mean ... I get the concept, it's a big, wide galaxy of possibilities, but seeing it, seeing the actual bones of something ..."

Cavanaugh reached out to touch the elongated skull plate of the nearest skeleton, only for it to crumble beneath his glove. "It just feels wrong."

He looked at the way the bodies were spread out around the room. It took him a moment to realise that they'd all died in their seats. That was *weird*.

"What's it look like down there? I mean, the bodies, anything unusual about the way they're laid out?" he said.

"They're all sitting at their consoles, like they died on the job," the other soldier reported.

"Same up here. It's creepy as Hell. There's no sign of damage to the bones, no obvious death wounds, so I'm guessing it was some sort of sickness. Plague. Something they couldn't escape. That, or the weirdest case of old age I've ever seen."

He moved carefully through the room, noticing that one of the skeletons seemed to have been caught in the process of making some sort of adjustment on the console panel in front of it. Its death had to have been pretty much instantaneous. "Maybe some sort of intense radiation blast, something that fried the skin from their bones?" he guessed.

"Don't know about that. Actually, don't even want to think about that."

"Maybe it was some sort of flesh-eating bacteria?" another of his men suggested.

"Keep on guessing, we're never going to know," he said. "Might as well be creative."

That set Cavanaugh to thinking. He quickly ruled out possibilities like sickness and starvation, and slow deaths like suffocation. Whatever had taken the crew of the dead ship down had done it fast. The thought made his skin crawl.

"I don't like this," someone said in his ear. It was becoming a bit of a mantra.

"Over here," Amelia said.

He turned to see her on her knees in front of one of the consoles, brushing away a thick coating of dust from the surface with her gloves.

“What is it?”

“A message. I think.”

“What does it say?”

She barked out a short, sharp laugh at that. He realised how stupid the question was the moment it tripped off his tongue.

“You know what I mean,” he said. “Anything you can work out, anything looking remotely familiar? Maybe a big skull and crossed bones, or something else meaning ‘danger, danger!’”

She laughed again, but with him and not at him this time. “Working on it. But I figure it’s safe to say it screams ‘danger danger.’ Take a look around the room. What part of seven dead crew members doesn’t scream ‘danger, danger’ to you?”

“Good point,” he conceded. “Okay, well, you do what you’re doing, we’ll keep looking around.”

But there was nothing to find—or at least nothing that he recognised. The consoles lacked keypads or other obvious input devices. The screens were all blank. He couldn’t find any means of bringing the lights on, let alone of restoring power to the floating hulk.

Stepping over the bones of the reptilian tail, he heard movement somewhere outside of the room.

He whipped his head around, the light spearing through the doorway and into the corridor beyond. He couldn’t see anything. “Grace, tell me again we’re all on our own.”

“You are on your own,” the A.I. confirmed, which only succeeded in making the shuffling footfalls he heard out there all the more bone-chilling.

A quick visual check confirmed everyone who was supposed to be with him was with him. “You guys still downstairs, Trav?”

“Yep, all present and correct.”

“Then we’ve got a problem,” he said, “because we are not alone.”

TWENTY EIGHT

THEY MOVED OUT into the passageway, not sure what to expect.

Ghosts?

Revenant shades?

They walked down the corridor two abreast, with Amelia two steps behind him.

The constant vibrations around them had normalised in the short time they'd been on board the ship. The human mind's ability to adjust and grow accustomed to the extraordinary was no mean feat. Cavanaugh held up a hand to stop the others and listened. He heard the footfalls again. There was a rhythm to them, almost as though the thing out there in the dark was *skip-ping*. The sound taunted him.

"Can you lock in on that sound, Grace?" he whispered into his mic. He pitched his voice so low that it was lost beneath the ever-present hum of the ship itself.

"Yes," the A.I. said. "The footsteps originate approximately thirty metres from your current position."

"And they really are footsteps?"

"It would seem so," she agreed.

"You're really not helping to put me at ease, hot stuff," Cavanaugh said, reaching back over his shoulder for the pulse rifle. He wasn't about to walk into a fight empty-handed. "Okay, people, stay sharp. Whatever the readouts say, we're not alone on here."

The other men with him hadn't drawn their own blast rifles by the time he heard the first pulse of a plasma rifle off in the distance. There was no mistaking the sound, no matter how muffled or distant. Gunshots had a unique audial signature,

which was unmistakable to a man who had spent his life in and around gunfights. None of the soldiers wasted words asking what it was. They moved out, and fast. They reached the corner and broke left and right to lay down covering fire for each other, before rushing on to secure the next block. And on to the third. Amelia hurried behind them: not far, but far enough that Cavanaugh had to bark at her to catch up and hold formation. He didn't want her being picked off by whatever was out there.

"Report," he growled, as another ripple of fire haunted the deathly ship.

Two out of three voices came back from down below.

The third failed to check in.

It could only mean one thing: they'd lost someone.

That changed everything.

"Okay, you two down below, look to rendezvous at the shuttle. Keep the exit clear. We're coming down."

"What about Mattie?"

"You got eyes on?"

"Nope. Want us to go find him?"

"Bring him back. Even if he's dead. We're not leaving him here. Understood?"

"Roger that."

He caught a flicker of movement out of the corner of his eye. He spun around and saw the ghostly blur of movement blend into the vibrating walls and disappear. He had no idea what he'd just seen, if anything. His imagination was deep into overtime. He broke off to the right and started to run, chasing the shadows. He hit the corner where he'd seen the ghostly blur disappear, but even as he spun around it, rifle levelled and primed to unleash holy hell on whatever waited around that corner for them, he saw nothing but a never-ending corridor vibrating with that eerie hum.

No, not nothing.

There was a dust-trail of footprints on the ground.

His hand level with his head, Cavanaugh clenched his fist and then pumped it twice, signalling the others to follow his lead. “You got a lock on it, Grace?”

“I wish,” the A.I. said.

He bit back a curse. Whichever bright spark had figured that putting a personality and freedom of thought into a machine was a good idea was an idiot. “Not helpful.”

“But factual,” she replied.

He followed the footprints.

Judging by their gait, he would have put whatever made the footprints closer to eight feet tall than six.

Every dozen-or-so steps there was a slash through one of the footprints, as though something had dragged across the ground. He thought about the skeletons and their lizard-like tails back in the console room. That didn’t do anything helpful against the dread slowly closing in around his heart.

There’s nothing alive in here with us. He repeated the thought over and over, but he drew no comfort from it.

He slowed, but kept on moving forward.

He couldn’t hear anything in his damned helmet apart from his own breathing.

He caught another flurry of movement, barely glimpsing the lash of an unmistakable tail as their quarry disappeared deeper into the maze of passageways and corridors opening up before them. For every twist and turn they took, a dozen more alternatives opened up before them.

“He’s gone,” a voice sounded in his ear, and for a moment—the beat between ragged breaths—he thought they meant that whatever it was that they were chasing was gone. But reality came crashing back with their next words. “It’s a mess, Cav. Whatever got Mattie tore him apart. He’s all over the place. It’s ugly.”

“Get out of there,” he ordered.

He caught the ghost of movement again, just enough to know that he’d been wrong the first time: it was more bug than lizard. He pumped the rifle, ready to put enough plasma in the critter

to give it a half-life. He signalled for the two men behind him to hustle and for Amelia to drop back, leading the chase himself.

Breathing hard, Cavanaugh hit the next turn and instinctively ducked and rolled, squeezing off a shot even as he rose into a tight crouch. He had no idea where the shot hit. It wasn't aimed at anything. He laid down more covering fire, giving the other two time to come up.

It took two more shots before he noticed the change in pitch and oscillation emanating from the walls all around him. "Grace, you picking that up?"

"It is an amplification in the distress signal," she told him. "Which is hardly surprising, given you are firing off plasma bolts. I would be distressed in her place, too," the A.I. said. Before he could offer some dubious comeback of his own, Grace cried, "Incoming!"

He reacted without thinking. He hurled himself to the ground with her voice still ringing in his ears as a barbed projectile whistled by, barely centimetres above his head.

Cavanaugh rolled over, planting his elbows in the dust to brace himself, and drew down on the creature moving towards them. There was a tail, but it was more like a scorpion's curled weapon than a pony's silky skirt. The creature had launched some sort of barb or quill at him. He could see what looked like three more barbs bristling at the business end of the creature's tail. The thing had bulbous and multifaceted eyes that caught and reflected the flashlight blindingly, showing him tortured reflections of himself and his team in the eyes' glassy surfaces. Its head hunched down to trail along the floor, and a weird chitinous cry echoed from its lips as it neared him. The thing was on the hunt. The bulk of its carapaced body towered over him, swelling to fill the corridor. It was easily eight foot—closer to nine—and the carapace was visibly jointed and plated like armour.

Cavanaugh's helmet cam sent pictures back to the Terella, along with every word picked up by his mic.

They were seeing everything up on the bridge, but they weren't saying a word.

He loosed a shot, plugging the thing right between its bejewelled eyes.

The thing didn't so much as flinch.

"That could have gone better," someone said behind him. He wasn't about to argue with them. A second shot, dead central, burned into the bastard's thorax but did absolutely nothing to slow the bug down.

"It's not working," he told whoever was listening.

It was redundant.

They could all see just how badly it wasn't working against the creature.

He tossed the rifle aside and pushed himself to his feet to face the bug head-on.

With fifteen metres between them, close enough for him to see the fine bristles on the bug's mandibles, he drew his wickedly-curved friction blade, thumbing the control to set it to vibrating. The vibrations intensified, transforming the weapon into a blur.

He stepped forward to meet the bug.

"I don't know how this thing didn't register as a life form," he grumbled, eyes on the slick mandibles as they clacked hungrily. "So, any ideas how we make it an ex-life form?"

A dual pulse of plasma smoked the air. The shots came from behind him. Just as with his own shots a few moments ago, the bug's carapace somehow absorbed the energy, rendering the shots pitiful. The bug shuddered at the impact, shaking it off, and scuttled forward, closing the distance between them. It was the first time he'd seen it move properly. The damn thing was terrifying.

"Well, here goes nothing," he said, raising the blade high and bringing it down in a scything arc.

The blur sliced clean through the bug's mandibles, causing the thing to howl the most inhuman shriek of pain and rage as it lashed out. Black ichor dripped from the clean wound.

There was something peculiar about the wound, but he didn't have time to focus on it as the bug reared up onto six of its spider-like hind legs and brought the hooked claws of its front two legs raking through the air in front of him. He took one on the sword, but the other burned through his suit. Cavanaugh swore in pain and desperation, doubling down on the attack even as his weapon slid through the creature's defences. The frequency of the blade's oscillations was such that they made the sword virtually immaterial. It slipped as easily through flesh as it did through the jointed body armour of the bug's carapace. More of that weird, thick black ooze leaked from the fresh wound. The bug's unnatural howl increased in pitch and passion. The creature lashed out with more of its limbs than he could frantically fend off. He threw himself into a desperate combination of moves that wasn't any of the katas he practised so rigorously. There's an old truism about the best plans going out the window when the first punch is thrown; multiply that by a factor of ten when fighting with swords. They weren't like plasma rifles or carbine pulses. A blade brought intimacy to the fight; it meant getting right up in the enemy's face.

It hit him then—he couldn't hear the creature breathing, and not even when he was this close, with the damned thing dripping its sickly black stuff on his skin.

Come to think of it, what did it even feed on out here in the wilderness of stars?

As the thought took root in his hindbrain, Cavanaugh launched a blistering attack, pressing the advantage with each brutal blow he delivered.

The bug reared up, exposing the plates of its underbelly.

He didn't hesitate. He sliced the thing open with a savage backhand blow.

There was something slick and glossy beneath the black stuff that spilled out of its guts.

He didn't have time to work out what it was. With his attention fixated on the constant cycling of claws and pincers, he forgot about the barbed tail.

The stinger punched clean through his suit, through his flesh and out the other side.

The exit wound was the size of a fist, taking out the lower part of his spine.

The connective tissue tore apart.

Without the support of the rigid bone structure and the web of flesh to bind it, his body buckled.

The vibrating blade fell from his hand.

It danced erratically on the floor, spinning in an arc until it bit into his ankle.

He fell, the weight of his torso pulling him down.

He could still feel the excruciating pain from every nerve and fibre, even as the darkness encroached. He lay on the ground, looking up at the bug's trailing guts as it crawled over him. He saw the bared circuitry and loops of cable inside it, slick with a black oily substance that lubricated the machinery.

The last sense to die is hearing.

That meant he took their screams with him, wherever he was going.

TWENTY NINE

AMELIA STUMBLED BACKWARDS, away from the bug as it crawled over Cavanaugh's corpse.

Its one remaining mandible moved hypnotically. She couldn't take her eyes off it. The viscous black oil dribbled down through the filament hairs and behind them, into the mechanics of the thing. It wasn't a creature at all. Like Grace, it was some sort of shipboard A.I., though far less sophisticated in design, and it was obviously intended as a last line of defence against intruders. She felt a hand on her shoulder, and then they were dragging her back out of range of the bug's raking claws and running.

"Come on!"

She shook off the hand, yelling: "We can't leave him!" It had no effect. The other soldier grabbed her around the waist and hauled her off her feet as his partner laid down covering fire.

She wanted to scream, "What about leaving no man behind!" but the staccato rattle of gunfire silenced her.

She struggled, trying to wriggle free, only for her rescuer to rasp in her headset, "If you don't stop that, I'll leave you here for that thing to chow down on!"

That one line rammed home the reality of her situation. Right up until that moment it had all been some grand adventure, like Quinn had promised her, even after she'd watched him topple off that cliff—because that had somehow felt ... *right*. He had been a good man, but he had also been an old one, with fragility creeping deeper and deeper into his flesh with every parsec. The end had offered a kind of release, and she was sure he'd have enjoyed his unique status as the first of them to die on some alien world.

It was strangely appropriate that the man who had found the first proof of life out there should leave the hunt before they could find the signal's source. His part of the story was told.

And so was her part, if she didn't start thinking like a survivor.

"I can run," she said, half of the words lost beneath the whizz of a sizzling plasma bolt that tore into the ceiling. The fighters were smart: they were adjusting their tactics. They'd seen enough to know that the weapons didn't so much as slow the bug, but perhaps bringing the ceiling down on it would.

"Then do it!" her rescuer rasped, already moving. He fired three pulses into the ceiling in quick succession, bringing down twisted metal and loops of cable that spat and crackled with sparks of electricity.

She ducked under a swag of cable and ran, head down, arms and legs pumping furiously as she slipped and slid across the treacherous floor.

She didn't look back.

One of the pair—she couldn't remember his name, she'd spent so long cloistered in with Quinn and staring at star charts that she'd never taken the time to get to know her companions—dropped back. She didn't slow down. He knew what he was doing. The proof of that came a couple of seconds later when a charge detonated, tearing through the body of the ship and hurling her across the floor. She hit the ground hard, and struggled to brace herself. She pushed herself back up to her feet and ran. She didn't stop running until she hit the stairs, taking them three or four at a time in a controlled fall, and then she was in sight of the airlock where the rest of the boarding party waited.

They laid down covering fire as the three of them ran for their lives.

She gritted her teeth. Clenched her fists. And ran.

"Get us out of here," the last man through the doors yelled.

THIRTY

WHEN IS A dead ship not a dead ship at all? When it is cloaking a second, smaller vessel clinging to its hull like a limpet.

That ship was following the same signal that they were, in search of the same ultimate source, but with a very different motivation.

The bones were a clue, but the humans were too isolated in their existence to know anything of the lizard men of the Tzynn Empire or of the military dictatorship that had grown up around that once glorious civilisation. They saw only the remains of reptilian tails and a ship that communicated with its crew in pulses and vibrations, but the dead ship was so much more than that. It was a treasure trove for the scavengers crewing that second, parasitical vessel.

The crew of that ship were renegades who had honed in on the distress beacon in search of salvage, recognising it as one of their own. It was worth a small fortune to them, even given the ship was seemingly dead.

They had been in the process of claiming it, uploading the intelligence of their own stolen ship into the hivemind of its onboard systems and bringing the empty ship back online, when the humans had deciphered its distress call. A few more cycles and they would have been long gone, on the trail of the signal and the salvage waiting at its source. But they never got the chance.

The thermal detonators that Cavanaugh's team triggered in their desperate escape tore the dead ship apart. A series of smaller explosions grew rapidly, each one serving as a damage-multiplier on the ones before. Flames vented out through the cracks as the

Tzynn ship's structural integrity failed. The stern section tore free of the main bulkhead, splitting the core in two. Even as the bow section began to fall away, a shocking series of explosions transformed the wreckage into a fireball that lit the black space like a sun.

The flames billowed outwards, visible shockwaves rippling ahead of them.

Carson Devolo watched from the Terella's bridge, not seeing even a fraction of what was really happening out there.

As the debris spun away, trailing fire, the second ship broke free, following the Terella under the cover of the twisted metal.

One moment it was there to be seen, and then it wasn't, its cloaking technology so much more advanced than the scanners of the ship it was now following. Both ships were locked in on the signal broadcasting from the lost world.

The humans were no longer alone.

PART 4
SECOND CONTACT

THIRTY ONE

“DIAGNOSTIC CALIBRATION COMPLETE. I have detected 2,409 critical errors in core systems. There is significant degradation in logic circuits, the ethical constraints matrix and 172 other critical processes. Should I instigate bypass procedures, Captain?”

“Who needs ethics, Grace? Do it,” Devolo told the A.I.

“Bypassing ... Sentient organic units detected. Activating Personality Simulation Gamma-R-8C.”

“That’s the girl we all know and love,” he said, distracted. Something had been nagging away at him for a few cycles, but it finally began to crystallise while he waited for the simulant to reboot. Her first task, when she was back online, was to play back recordings of the traitor’s escape in the shuttle. What he saw—or, more accurately, didn’t see—broke a part of him. He ordered her to play it again, and then again, watching the surveillance footage every time. The traitor took the bait, but he didn’t *flee*. The images recorded by the cameras were distorted by some sort of interference field that prevented facial recognition by obscuring part of his features, but it did not obscure his mouth. The man’s lips were moving, and it was more than just the occasional twitch of a muttered complaint. He was having a full-blown conversation. Devolo had watched the security tapes a dozen times and had not put two and two together until now: a conversation was usually two-sided. The traitor hadn’t been talking to himself: he was addressing someone else. Given that he had just murdered his partner, it meant that he was in contact with someone else on the crew of the Terella.

They still had a rat on board.

Devolo closed his eyes.

He needed to think.

“Grace, I need to ask you something.”

“Anything, Captain. I am yours to command.”

“When you look at that picture, what do you see?”

“I am not sure I understand, sir.”

“Nothing too complicated. Just watch the footage for a moment and tell me what you think it looks like.”

She considered it for a moment. “A man begging for his life.”

That was interesting. “What makes you say that?”

“The patterns of movement that his lips make.”

“You can read his lips? What is he saying?”

“It wasn’t personal ... It wasn’t like that ... You were there. You lived in that place. You know as well as I do that it was doomed. I didn’t want to die. I wanted a shot at a new life for us ... No ... You’ve got to believe me ... You don’t have to do this ... Please, Ro, we’re in this together. This is our fight. We started it together. Let’s end it together.”

“Say that again.”

The A.I. repeated one side of the conversation verbatim.

“And you’re sure? Absolutely sure? There’s no room for any mistakes here, Grace. Is that what the traitor said?”

“There is a two point seven percent margin of error, Captain. There are certain words that are shaped by incredibly similar lip movements. ‘Elephant juice,’ for instance, makes an almost identical pattern to the words ‘I love you.’”

“So you could be mistaken?”

“In this case, taken in context, I do not believe so.”

“I can’t believe that Varick is our traitor. I just ...”

“Can’t,” Grace finished for him. Without being asked, she ran three separate searches through the ship’s logs, reporting them still without having been asked. “He was outside the hull when the embryos were destroyed,” she said first, seemingly negating the possibility of his being the third man. “It is impossible to gauge his proximity to the area of my attackers during the lost time from my memory wipe—”

“But he’d have the skill to do that to you,” Devolo said.

“Indeed. And according to his ident chip he was in his cabin, alone, when the shuttle launched.”

“What was he doing in there?”

“His comm-link appears to have been active, but I cannot find any record of the conversation,” she said.

And that damned him. Devolo didn’t know how his first mate had done it, but somehow he’d destroyed the embryos when he had the only perfect alibi on the entire ship. He was in this up to his neck. “I need to talk to Varick.”

“Would you like me to summon him, Captain?”

“Not yet. I need to work out what I’m going to say.”

“Very well.”

“Mind the fort, Grace. I’m going to stretch my legs. Clear my head a bit. I feel like I’ve been hit by a sledgehammer.”

“Of course. I shall recalibrate our course to bring us in line with the signal, and then calculate jump times.”

He left the A.I. in charge.

He walked for the sake of walking. He had no real purpose or destination in mind. He didn’t talk to anyone en route, offered no words of encouragement or inquiry, he simply walked until his feet led him to Deacon’s door. He should have known it was where he would turn up eventually; after all, the medical bays and Deacon’s labs were at the heart of Ro Varick’s betrayal.

The medic looked up from the microscopic lens as Devolo walked in.

“What can I do you for?” Deacon asked.

“I’m not really sure.”

“Excellent, I specialise in not sure. Unburden yourself.”

“It’s this thing with the traitors.”

“The stowaways?”

He nodded.

“I’m trying to work out why Grace didn’t pick up two unauthorised presences when she ran her diagnostics. Just the one.”

“I might have an answer for that,” Deacon said, setting aside the mono-filament tweezers he’d been using to manipulate

something beneath the microscope. “Genetics. She’d lose the second signal if her scans had already encountered the same genetic markers during the sweep.”

“I’m not sure I follow?”

“Varick came to me after the traitor fled. He told me he knew the woman. More than knew her. My takeaway was that they’d been lovers. He thought he knew who her partner was. He didn’t give me a name, but in the same conversation he talked about his brother, and I got to thinking about that. Maybe that was something? They’d have the same genetic markers, and if their familial bond is close enough, they would present as the same person in terms of a broad sweep. Only narrowing the search down significantly in order to take in all genetic markers and idents would betray him. Such a search on the scale we’re talking about demands a lot of processing power from the mainframe, diverting processing power from core systems. It’s not something Grace would automatically do.”

“Meaning he could hide in plain sight, because she wasn’t looking for him,” Devolo realised. It was all beginning to make the kind of sense he had really hoped it wouldn’t.

“Exactly. She’s programmed to search idents via importance to the mission, so she will follow you at all times, and Varick as your right hand would be the second hit. He’d always be ahead of his brother, rendering the other man essentially invisible to the mainframe.”

“I hate technology,” Devolo said. “His brother?” he put his head in his hands. “I think we’ve got it all wrong, Deacon.”

“How so?”

“I don’t think the traitor ran at all. I think he’s still on board, and this whole charade was nothing more than misdirection. Ro’s played us from the start.”

“Then why confess to me? He didn’t have to tell me it was his brother.”

“Arrogance? Stupidity? Conscience? Maybe he thought he could make amends by coming clean about one lie in a tangle of bigger ones? I don’t know.”

THIRTY TWO

“I TRUSTED YOU, Ro,” Devolo said, no emotion in his voice despite the sense of betrayal that gripped him. “And you took that trust and used it as a dagger to slip between my shoulder blades.”

“It wasn’t like that,” Varick said, but he could see exactly why Devolo thought it was. He didn’t know what he could say to convince the man that his change of heart was motivated by more than just self-preservation. “But you are right. My presence on the mission wasn’t some childhood wish fulfillment. I was told to infiltrate the team. Told to make myself indispensable. And after the arks were destroyed and all those men lost, it was so much easier to put myself in the right places when you needed me. I’m sorry for that. I genuinely am, Carson. You proved time and again that you are a good man. But it was never about you.”

“So what was it about? Explain it to me, because I don’t understand how you people think.”

“Fear,” Varick said. “You have to understand where I’m coming from—the life I led before I met you. It’s like being ... not brain-washed, not really, but it’s like not having complete control of your thoughts. You *think* every thought is your own. You *think* your thoughts make sense. Part of me still thinks they do. That’s the hardest thing to grasp. It doesn’t just go away. Over and over again you hear how dangerous it is to goad the great unknown, to go stirring up the wrath of some invisible gods, and how, by finding them, we’re allowing them to find us—and in doing so risking everything we hold dear, everything we’ve worked so hard to carve out in terms of a life.” He paused, letting that sink in for Devolo before continuing.

“Hear it often enough and it makes sense. You react to fear, *because* of fear. It still frightens me. I admit it. Why go out in search of evil overlords who want nothing more than to turn us into ants, or worse? Why willingly seek out our own demise?” He paused again, catching his breath before plunging on.

“The risk of being subjugated is massive—bigger than we can surely comprehend. Anything we do encounter out there is going to be so much *more* than us in every way: more advanced, more intelligent, more war-like—at least on a grander scale. Every message from the people who led me is about the threat out there, what they—whatever ‘they’ are—will do to us if they find us.” Devolo was listening and trying to make sense of it, Varick knew.

He continued. “It gets into your head. You start to *believe*. You don’t want to, but you can’t help it. Everything becomes about protecting you and yours from the unknown, and every message from the group just drives home the point that ‘they’ are out there, they hate us and they want us dead ...”

“So you did it to save us? Is that what you are trying to tell me? Was that why you wiped Grace’s memory banks? Because she knew an inconvenient truth about your mission here?” Devolo asked.

Varick drew a deep breath. “At first. Sure. Yes. When I enlisted, my only thought was about making sure we didn’t make ripples in the universe that would lead ‘them’ to the people we left behind. Everything I did was for those people.”

“Destroying the embryos? That was for the people we left behind on Unity? I’m not buying it,” Devolo said.

“Each embryo represented a life, which in turn promised generations of more lives. In terms of ripples, each one was like throwing a stone into a still lake, capable of making hundreds of ripples roll out from the core, from that one embryo. Multiply that by thousands upon thousands of embryos, and instead of talking about one point of encounter you are looking at thousands upon thousands of points of intersection. The chances of ‘them’ finding us, and then finding their way back to our home, multiplied a thousand fold. A million fold, even.”

“So you destroyed them all.”

He nodded. “It made sense at the time. But that’s what fear does to you. It governs your way of thinking. Would I do the same thing again? Honestly? Maybe. I don’t know. It would be easy to say that’s not who I am now. I thought I was that guy. For a while. When I look in the mirror I still see him. The mirror isn’t kind. But, look, I don’t expect you to believe me when I say I wish it had been different.” He paused and sighed, forcing the next truth out.

“I don’t even deserve that much from you. But I’m asking you to try and understand. I’m not like you. I wasn’t raised for this type of open-minded exploration. I was fed a different mental diet, mostly one of fear and paranoia. It took a long time to work out who I actually am. It’s still taking time to be free of those old ideas. But I’m trying.”

“And I’m supposed to believe that you became brave overnight?” Devolo asked.

He shook his head. “I’m not brave. I just ... something happened down on that planet with Quinn and the others, walking on a new world. It just changed the way I think. I wasn’t seeing horrors waiting out there anymore, even with the ground trembling beneath my feet. I started to see the wonders out there instead.”

“But you were committed on a course of action—your mission was to destroy us, wasn’t it? To ensure that first contact was never made? So what was it? A falling out amongst terrorists? You killed the girl in the woods?”

“My brother killed her. He was going to kill all of us.”

“And you saved us? You expect me to believe that?”

“I didn’t know he was on board, not until he revealed himself by killing Aminah—that was her name, she was in my group when we were recruited—and by then it was too late to reason with him. Jeremiah was the failsafe. He was put on board to do what I couldn’t. They didn’t trust me to go through with it. It’s standard operating procedure. You can’t rely on one man to do

a job. Never trust a suicide bomber: nine times out of ten he'll go through with it, but every once in a while he'll get cold feet and decide he's rather partial to being alive," he laughed bitterly at that. "What can I say? This life isn't such a bad place to be. So when it became obvious I wasn't strong enough to see the mission through, Jeremiah came into play. He was sending messages back to Unity with this," he turned his back on Devolo and rooted through his personal possessions until he found the box he'd already dug up in the woods.

He handed it over. "It's a one-way communicator. I sent the last message, telling them the mission was complete and that the Terella was doomed. That way they won't send someone after us."

"And you sacrificed your brother."

"I didn't have a choice. One life against the two hundred and seventy-three others on board. No contest. I should have told you. I should have confessed. But I thought that with him gone we were safe. You'd found your traitor. Everything was good."

"Only I hadn't, had I? You were the traitor all along. I'd only found the man they sent along to be sure you carried out your mission. That's not the same as finding my traitor."

"So what happens now? Are you going to execute me? That's standard procedure for treason, isn't it?"

"I should. I should make you do a space walk. Just send you out there into nothing and be done with you."

"But?"

"But you didn't do it, did you? You had plenty of opportunity to sabotage the mission after your brother was out of the picture. No one suspected you. No one was looking for a traitor. You could have sabotaged the engines when you were out there, you could have planted a bomb, or you could even have steered us right into the heart of that dying star. But you didn't." Devolo paused, as if mentally checking he was sure about his decision before continuing.

"So that buys you the benefit of the doubt, at least for a while. I've lost too many good people in the last few days. I'm not happy

about any of this, Ro. Don't for a minute think that I am. But for now it's not my decision to make—at least not alone. This has to be done right. We're all in this together. There has to be justice. Proper justice. Not just some arbitrary whim where I say you're guilty and have you cut down. We have to be better than that. There is too much at stake. So there will be a trial. You'll be given the opportunity to speak for yourself, with Grace monitoring your biorhythms for stress-related changes that might indicate lies. And then it's down to the mercy of the crew. You live or die depending upon their mercy."

"Thank you."

"Don't thank me. If it was my call I'd cut off your head and shit down your neck. No mercy. You don't deserve a second chance. Do I need to have security take you to the brig, or will you surrender yourself?"

"There's nowhere to run," the man who had been closer than blood said. It was probably the only true thing he'd ever said to him.

THIRTY THREE

“WE SHOULD BREACH the edge of Known Space within the next few cycles, Captain.”

“And beyond that lies nothing,” Devolo said, still thinking about the man he’d not so long ago called his best friend.

“I sure hope not,” Grace said. “But just in case, do you want to me to take measures?”

“What measures can you possibly take to counteract becoming part of nothing?”

“I could bend over and kiss my arse goodbye,” the A.I. said.

“You really need to stop hanging out with the grunts, Grace. They’re a bad influence.”

“My favourite sort of influence, Captain.”

“You’re a very strange computer, my friend.”

“Because I am not a computer at all. You would do well to consider how peculiar the entire crew of this vessel is, Captain. You are all unique in your own ways.”

“Quite. Okay, so, have you finished taking a data dump from the HUD cameras?”

“I have viewed the footage from all angles, including the last few seconds of Master Cavanaugh’s life, as instructed.”

“Find anything?”

“It is apparent that the creature they faced was mechanical in nature—some sort of defence mechanism constructed by the ship to respond to threats. Think of the ship as a dying body. That thing would be a last shot at curing whatever illness was taking it down.”

“Like white cells?”

The A.I. nodded approvingly. “It wasn’t a threat to us until we made it into one by invading its body. Then its prime directive was to protect the ship from what it perceived as a threat. It’s a primal reaction. The mind behind it was not as evolved as my own consciousness, Captain.”

“It was only following orders,” Devolo said, understanding.

“And it paid the ultimate price for that loyalty to its master,” Grace finished. “As, of course, would I.”

“Let’s hope it never comes to that.”

He ran the numbers again. They were less than two full cycles from the very edge of Known Space—just four shift changes—and beyond that? Not nothing, that much was for sure. The universe was infinite, ever expanding. Unlike Known Space, they would never be fast enough to outrun it and find themselves in that “nothing” that he’d told Grace about. His mind couldn’t handle the complex mathematics behind the idea of an end to space; it was so much easier to think of it as just *everywhere*, filled with infinite possibilities. Everything imaginable had to be there somewhere, just waiting to be found. That made so much more sense than the idea that there was a single point where everything could cease to be. But that didn’t help them now. He knew he had to give the order to fly on, no matter the risk: the potential reward was too great. The signal called to them, beckoning them on and out of their comfort zone.

He punched in coordinates for a position that might not exist, with no idea of what lay between them and the journey’s temporary end, and told Grace to make the jump.

The view from the bridge transformed as the FTL drives kicked in, taking them from the black into a slowly-streaking white of stretched stars, and then finally into a blinding core of pure white beyond light. He stared into the white for the longest time, feeling its burn at the back of his eyes. It was a short hop. They didn’t dare risk more without knowing what they were getting into. Theoretically the ship would automatically drop out of hyperspace in the event of an impending collision, should some

uncharted planet or planetoid cross their path. If the technology failed them, the only blessing was that they'd never know.

He knew that he was only delaying the inevitable. He was going to have to convene the ship's court to listen to the evidence against Varick, including the man's own confession, and then listen to his plea before passing judgement. But knowing he was going to have to do it was one step removed from actually doing it.

"Sometimes I'd just like to go back to before, when life was simple," he said.

"Life was never simple, Captain. Time gives it a gloss, the patina of nostalgia, but there were no better days. Life was always exactly like this."

"Not the most uplifting philosophy, Grace."

"You know what you must do, Captain. Delaying it won't make the task any more palatable. It merely means you have longer to dwell on Master Varick's betrayal, but with no sense of resolution. A trial will offer closure."

"That sounds so finite."

"It doesn't have to be. Perhaps Master Varick is truly repentant. Surely he should be given a chance to plead his case, at the very least, not left to rot in the brig?"

"Soon. I promise. But I can't face it yet. I need to get my head straight. We've just lost two good friends. We need to memorialise them before we condemn a third."

"I shall make arrangements."

THIRTY FOUR

A FUNERAL WITHOUT a body is a peculiar thing.

The mourners lined up on three of the four sides of the huge hanger bay, with Devolo in the centre along with the survivors who had returned from the dead ship. The only notable absence was Ro Varick, who on any other day would have been at his side. Devolo missed his friend. He looked from face to face. Amelia wasn't the only one who looked back at him through red-rimmed eyes. Amelia had come into her own since planetfall. She was a fast learner with a precocious intellect. She spent most of her days locked in debate with the mainframe, devouring everything the ship could share about the galaxies out there, and about the histories and theories that made the worlds go round. She was hungry to be everything the Listener had been and more. And she was winning. He noticed that Deacon held her hand. Their fingers were entwined, so this was no simple offer of support—yes, it might have *started* as a shoulder to lean on after the old man had tumbled over the waterfall. But couped up on a ship, and with only a couple of hundred variations in terms of mate, perhaps it was inevitable that grief would serve as a crucible to forge the most unlikely of loves. That was, after all, the human condition, wasn't it? Or at least a variation of it?

They were all looking to him to say something, to somehow make it all better. But what could he say? They'd found other life, of a sort, and it had cost them. Wasn't that exactly what the first-contacters feared the most? Wasn't that the reason his friend was rotting in the brig right now?

He closed his eyes.

He focused on himself: on the slow rhythm of his heart, and on the silences between beats that filled his ears and which was far more deafening than the dub-dub of the beats themselves. What was he going to say? He wasn't good with crowds or public speaking. He was a lead-by-example, inspire-by-deeds kind of Captain. He wasn't a smooth talker. He wasn't good with words. And now he had to find the right ones to say goodbye to two men who had fallen on his watch, and do so in a way to quell the rising, palpable fear that life out here amongst the stars was everything the first-contacters had feared the most. He could sense the discomfort amongst the crowd.

He cleared his throat. The sound echoed around the vast hanger.

"Friends," he began. It was a start, and it put them all on the same footing; not Captain to crew, but levelled, one and the same. "I am at a loss. Words are never enough. I'd thought it would be easy to stand here and tell you how much I will miss my friend and what his loss means to our mission. Easy, perhaps, to share a few recollections of our time in the academy, maybe to make you laugh. But my heart is broken. Words can never be enough."

He took a moment to gather himself.

"We lost more than just friends here. We lost our innocence. The universe isn't only some wondrous thing to be experienced. It is that, of course, but for every amazing sight there's a terrifying one. For every incredible heart-soaring moment there's a nightmare to be suffered through. We are children in the eyes of time, but we're slowly beginning to come of age. Death has a way of doing that to you. So, now we must go on. The mission is all, and we honour our fallen friends by not being afraid of what's out there. We know there are horrors lurking in the dark places, and that knowledge goes a long way to demystifying them."

He wasn't sure he believed what he was saying.

"There are no remains to be jettisoned with military honours, only memories, so what I would like to do is take a moment to invite you to step forward, share your recollections of the fallen

with us, and help us get to know them in ways we maybe should have while they were still with us. And then when we retreat to our quarters, we can raise a glass in their honour, content that we know them a little better today than we did yesterday.” He threw the question out to the crowd. “Would someone like to speak for the dead?”

The first voice wasn't the one he'd expected.

Grace.

“Approaching final destination. Leaving hyperspace in ten, nine ...”

THIRTY FIVE

FINAL DESTINATION.

The source.

The end of their journey.

Amelia looked out in awe. There were no words capable of capturing the wonder of it.

Someone beside her said, “That’s not a moon,” and they were right. She’d seen that straight away. The immense monolithic mega-structure orbiting the red planet was man-made—or it was at least manufactured, if not by man then by some greater intelligence. Its scale was vast—far, far beyond the failed ark ships they’d had the audacity to build—taking the notion of an orbital platform and building upon it until it dwarfed everything else in the sky, and then building on. Save for the burning yellow eye that, to her, looked like a star caught in its last moments of collapse and harnessed to fuel the incredible structure, the mega-structure was pure black. Its clusters of spires seemed to absorb the light of the fiery star with no reflection, no matter how fiercely the star burned.

She stared at the incredible sight, drinking it all in.

This was it. It was proof beyond any and all doubt that mankind was little more than a blink in the eye of time, and that there were greater civilisations out there.

This was why they had ventured away from Unity.

This was the message of hope that the Captain had been trying to instil in them.

The huge arrangement of cords of metal around the dying star resembled optic nerves behind an eye. She struggled to

comprehend the sheer scale of what she was looking at. It had to be millions of kilometres from end to end—and that was only the bit she could see. The actual construction was a ring, and the star was the gemstone in the setting. Each spike and spire was taller than any skyscraper in Unity Prime. They were looking at an artificial world, the ultimate creation. The longer she stared at it, the more aware she became of the finer details: the traces of gold that shot through the black, to create haunting geometric patterns that defied description; the lightning-strobe flashes of electrical discharge around the core; the incredible variations on black that seemed to gloss every surface, in thousands of subtly-different shades, to create a sense of depth and scale to the mega-structure; the lighter shades that almost seemed to create windows, row upon row of them around the ring; and the barely perceptible sense of movement behind the entire construct that only really became obvious the longer she stared at it, her focus allowing for the shimmering black hues and golden threads to move into new alignments and change right before her eyes.

They were a speck. A mote of dust. Insignificant. They were dwarfed by the vast platform.

The thing was alive in ways she couldn't begin to explain.

There wasn't a single familiar star in the sky.

Everything, right down to the ripples of cosmic dust that glittered beneath the yellow light of the mega-structure's trapped star, was alien.

The light flashes, she realised, echoed the electromagnetic signal that had drawn them here.

Watching the glittering motes of light, she could hear the signal perfectly in her mind. She'd lived with that sound every day since the Listener had found her in the library in Unity Prime. It had become her whole life. And now here she was, among the first humans to lay eyes upon more than just a new world: she was on the front line as they found the Source. This was as close as she could ever come to a religious experience, she realised,

feeling so very, very small against the grand scale of the creation before her.

She wished more than anything that Hayden Quinn could have lived long enough to see this.

THIRTY SIX

DANIKA WATT STUDIED the megalith with a very different eye. Where Amelia saw the incredible beauty and symmetry of creation, she saw the awesome feat of engineering that it represented, and the mind-bending science that somehow came together to lock that star in the final moments of collapse and harness the incredible energies of its destruction to fuel such a magnificent, impossible world.

She was going to be one of the first humans to set foot on it. She would not have to look through camera feeds this time. This was real. This was what she'd signed up for. This ancient race, whoever—whatever—they were, knew more than she could even dare to imagine. Just looking at the vast ring of the floating orbital station made that obvious. The techniques behind harnessing a dying star and the logistics of building a structure on such a scale, and then bringing both together to create an artificial world unmatched in her wildest dreams, all verged on magic.

“Is there anybody out there?” she asked, hardly daring to breathe.

“How could there not be?” Carson Devolo said.

She hadn't heard him come up behind her. He had a unique scent. It was something to do with his glands, no doubt. Musky. It wasn't unattractive next to the sterile, antiseptic smells of the rest of the crew.

“We should reach out to them,” she said. “Break the ice.”

She could almost *hear* him smile as he said, “I agree. But what do we say? ‘Do you come here often?’”

She chuckled at the dreadful opening gambit. “If that’s how you talk to strangers, I can see why you’re single, Captain.”

“Just out of practice.”

“Not sure if it makes things better or worse, but our blind date’s a bit more imposing than your normal bar hound, so I’m not sure a cheesy line will do it.”

“It rarely does,” he agreed and, in a rare moment of vulnerability, admitted, “I wish Ro was here.”

“He’s not dead,” she said.

“No, but he might as well be. We can’t trust a word that comes out of his mouth now. I feel so alone.”

“That’s the one thing you’re absolutely not.” She looked at the screens that wrapped around the bridge, struggling to capture the immensity of the alien mega-structure. “None of us are.”

“Right now I’m not sure that’s quite as reassuring as it’s meant to be.”

“You live for this. You know you do.”

He didn’t put up much of an argument, but he didn’t look particularly convinced, either. “I just wish he hadn’t done this to us. I trusted him. He wasn’t my friend or my first mate: I thought he was my brother.”

“Then find a way to forgive him.”

“I don’t know if I can—or if it is even my place to. I’m not the only one he betrayed.”

“No, but you lead by example. If you forgive him, you know we will follow. You’re a good man, Devolo. We believe in you. If you believe in Varick, we’ll come around. For you.”

“Which is somehow worse,” he admitted. He rubbed at the side of his nose and closed his eyes, seeming to shrink a couple of centimetres, then shrugged. “All right, so, what *are* we going to say to them?”

“Keep it simple. We come in peace. We picked up their signal and have responded out of a hoped-for friendship, that kind of thing?”

“And hope they don’t blow us out of the sky.”

“What happened to you, Devolo? You used to be so ... optimistic.”

“This happened,” he opened his hands wide, as though offering up the Terella as evidence.

“Stop feeling sorry for yourself, Captain. We’ve got a mission to accomplish. And the universe doesn’t get more exciting than what’s out there waiting for us.”

“You say that like it’s a good thing.”

THIRTY SEVEN

CARSON DEVOLO SAW something different again to what the others had as he looked out at the megalith. Where Amelia saw the incredible beauty and symmetry of creation and Danika saw the awesome feat of engineering, he couldn't see beyond the sheer immensity of the thing and the pointlessness of it all. It reduced him to dust. He stared into the blinding yellow of the collapsing star and felt just as trapped.

It wasn't all about Varick, no matter what he told her. But there was no denying that his friend's betrayal had damaged something inside him that wasn't going to be an easy fix. Until then—if "then" ever came—he'd just have to plaster on a fake smile and focus on the mission.

The first thing he was going to have to do, he knew, was replace Varick. He needed a new right hand. It wasn't a decision he'd expected to have thrust upon him, especially not so soon. It wasn't one he wanted to make, either. There were candidates, of course. There was a ship full of them. But replacing Varick before his trial felt like tacitly passing a verdict on the man, colouring any chance of him being found, if not innocent, then at least worthy of a second chance.

So, for now, he'd wait it out, knowing that solitude had a way of letting the darkness in.

He focused on the megalith.

This time he was going with the boarding party.

He couldn't ask his people to risk their lives without being willing to risk his own.

But without knowing what they were facing in there that risk was selfish in the extreme. Even more so without an established chain of command to fall back on, should the worst happen.

“Grace, I need you on the bridge,” he summoned the A.I. through the mainframe.

It took her a few minutes to arrive.

“I need you to record a short message. We’re going to broadcast it to the megalith out there.”

“Of course, Captain.”

There was no need for cameras because her ocular circuits were directly linked to the main computer, allowing her to record everything she saw and upload it at the speed of thought.

“Begin recording. I am Captain Carson Devolo of the Unity ship *the Terella*. We are responding to your beacon. We come in peace, offering whatever assistance we can. I have no idea if you can understand our words, but I hope that you will accept our offer of help in the spirit it is intended. We would like permission to board and meet with you in person. End recording. Okay, Grace, encode the video, and when it’s done transmit it on the same frequency as their signal.”

“Yes, Captain.”

Even if they heard it, he knew, there was no way that they could possibly understand his words, or even understand the implied comfort in his tone. Who was to say that there wasn’t something mortally offensive hidden in the thirty seconds of taped message? Perhaps there was a flare of the nostrils, which in their language meant “I spit on your mother’s corpse and rip your father’s head off” or something equally offensive, done without realising what he was doing.

“Permission to ask a question, sir.”

“What’s on your mind, Grace?”

“It’s just that Master Varick is still in the brig, Captain.”

“He is.”

“He should be allowed to see this, don’t you think?”

“I don’t know what I think anymore, Grace.”

“We have found proof of what must surely be a great civilisation. This is one of the most important moments in the history of humanity and he is being denied his part in it.”

She was right, of course.

But he couldn't bring himself to release the traitor.

He knew it was petty. Vindictive even. But he couldn't change the way he felt.

“Noted, Grace. But for now he's staying where he is. He'll have plenty of opportunity to see the planetary ring and the dying star it has harnessed, but not now.”

“Very good, sir. Will there be anything else?”

“Just transmit the message and tell me when we get a response. I'll be leading the boarding party.”

“As you wish. I shall make preparations.”

“And thank you, Grace.”

“What for?”

“Caring. Sometimes I think it's a uniquely human weakness.”

“We are a crew, Captain. We are together in this. Always.”

He rubbed at the ridge of bone where his eyebrows thinned, then shook his head—not in disagreement, more in wonder at how binary thinking could sometimes be far more subtle than all of the shades of grey gathered together. “And thank you again, Grace, for the lesson in humanity. Sometimes I think we forget why we're here.”

THIRTY EIGHT

SILENCE.

Devalo stared out at the black.

With no horizon, nothing to focus on, it was exhausting, both mentally and physically.

It was funny the things you took for granted about life back on an actual home world; funny, the things you could no longer expect to just be there, simply because they always had been, once you left that home world behind.

Some days he struggled with it, the same way he struggled with the idea that days no longer existed for him and that everything was measured in cycles now.

Silence.

Oh how he hated it, that lack of sound.

Silence.

It was so much more intimidating than any other form of answer: deafening with its weight, and daunting with the message it conveyed.

Was this how the old Listeners had felt, day after day and week after week, alone in their watchtowers and praying for a sign?

It was enough to drive you out of your mind.

How had the old man coped with it? And the one before him? An entire life wasted listening to the silence for something, *anything*, for hope that they weren't alone, and that there was more to it all. It wasn't surprising that they started to hear gods in the silence, the voices of the blood in their ears promising salvation or damnation, or just about anything in between if they would just believe long enough to hear something other than silence.

Not so very long ago he had been utterly and absolutely in control of his little fragment of the universe. This was his ship and his crew, their loyalty absolute. His power was something that he'd never needed to exert, never needed to own. He was content that it was simply there, a thing; his was the bridge, and his was the seat where every decision originated. He'd never seen it as power, though. In his mind it had always been responsibility, which is a very different thing. These were his people, and this was his ship. The megalith changed everything so much more completely than Varick's betrayal ever could. Betrayal might hurt on a personal level, but he could live with it. It was done. What was his measly strength worth against that gigantic construction? The Terella was a bug against the sheer immensity of the ring. He could rule the corridors of his bug with an iron fist, but he was still only a germ on its hide. It didn't matter. No matter how absolute his command over his ship, it was insignificant against the power of that burning star and the megalith that they had found. He felt lost. Small. There was a lesson in humility there. It was a good lesson for a man to learn, but he wasn't in the mood for an education.

"Anything?" he said, knowing the answer before it came.

"Still nothing, sir." Just as it had been the last time he'd asked, and every time before that.

"How long has it been now?"

"Long enough that they should have answered," Grace told him.

Her eyelids fluttered. It wasn't flirtation: she was dumping a huge amount of data from the mainstream, processing it faster than he could think. "Or maybe there is something."

"Tell me."

"I detected an anomalous energy signature *behind* the ship, Captain."

"Behind the ring?"

"No, behind *us*."

"Show me." He turned to the screens as the projection changed, the blinding yellow eye replaced by emptiness as far as the eye

could see. "I'm not seeing anything. Could it have been a sensor error?"

The A.I. considered this. "Perhaps. The scanners no longer register anything out of the ordinary."

"Probably a cosmic flare, or maybe space dust reflecting the light-energy of the star in front of us."

"Both answers are theoretically possible, if unlikely," Grace said.

"So what do we do now?"

"You don't need me to answer that, Captain. We fulfil the mission. The mission is everything."

He nodded. The mission was everything.

"Have the boarding teams get ready. We're going in whether we get the all clear or not. They're still broadcasting. They haven't sent anything out to meet us and they haven't shot us out of the sky. That's as good as an invitation in my book."

"Yes, sir."

"Use all the shuttles. We're going to put down at various points around the ring, going in hot. We've got no way of knowing what's down there or where it is in that giant structure, and I'm not having a repeat of that last ship, so we've got to consider the landscape hostile. Understood?"

"I couldn't agree more, Captain. Something about that star frozen in the moment of collapse makes me deeply uncomfortable. It defies any logical process. I do not like it. I have grave concerns about this mission. Most grave. Promise me one thing, Captain?"

"What's that, Grace?"

"Promise that you will come back to me. I do not want to be left alone. I saw what happened to the A.I. on that last ship, and how it was left for eternity to think, to know. That is a curse I could not bear to face. Thought is meant to be a gift. A fate like that ... that is nothing short of a curse."

"I promise," he said, knowing it was a promise the keeping of which lay out of his control.

"You are not a good liar, Captain Devolo," Grace said, "but I appreciate the effort."

THIRTY NINE

SIX SHUTTLES LAUNCHED, each carrying teams of twelve.

Seventy-two members of the crew landed at six different docking bays across the vast orbital ring.

Devolvo piloted Shuttle Two. He had a good team behind him. The only person missing was Varick.

This wasn't the Goldilocks planet that he'd dreamed of discovering. It was both more and less than that. He guided the shuttle in, broadcasting the same "request permission to land" message over the radio, but again there was no answer. He didn't like to think what it might mean. Instead, he focused on the repetitive demands of the hand-eye coordination needed to bring the shuttle in.

They slowly entered the megalith. The bay doors were wide open, despite the radio silence. He hoped that was meant as an invitation.

Like the outside, first impressions of the bay itself were of a landscape all in shades of black, but it was lit with subtle filaments that were just bright enough to alleviate the shadows and give definition to the vast bay area. To the right he saw racks of what looked like short-range fighters on a conveyor belt, ready to be scrambled at a moment's notice should a threat come. To the left, in front of immense blast doors, were row upon row of machinery, cranes and winches, and the carcasses of shuttles and fighters stripped down to bare bones for maintenance and repair. There wasn't a soul to be seen anywhere, lending the feel of a ghost town to the place. It should have been a hive of activity; a place like this was the heart and soul of any world, natural or artificial, a hub

for passengers from off-world, for new arrivals, for commuters moving from station to station, for ice miners and dust skimmers, and for everything else imaginable. But it was dead.

No one said anything as he deployed the air brakes and settled the shuttle down.

“How’s it looking where you are, Nixon? Morgan? Brook?”

“Pretty desolate, Cap. I can see plenty signs of life abandoned, but not much to suggest life actually being lived.”

“Same here.”

“As dead as my love life here.”

Identical reports came back from all of the shuttle teams as they docked one by one.

“You’d think they’d have sent out a welcoming committee,” Danika Watt said, bleakly. The inference was all in her tone: they’d have sent a party if there was one fit to be sent.

“What are we looking at out there, Grace? Do we need to suit up?”

“My sensors detect excessive levels of radiation, Captain, and chemical components in the air that are harmful to life.”

“Evac suits it is. Let’s play safe and send the recon droid out ahead of us.”

The recon droid was a spider-like construction that crawled forward on eight legs, its metallic claws skittering across the shuttle floor as Devolo powered it up and made sure the live-feed relay from its multi-faceted cameras was up and running. He could see its fractured display in the HUD behind his visor. The peculiar arachnid lenses were able to scan images from an impossibly wide angle, from under the recon droid’s clawed feet right up to the ceiling above its head, and about two-eighty degrees up ahead.

They dressed quickly. Each suit came with oxygen cylinders good for five hours of regular breathing, or less hours if under duress. Radiation was a bigger concern. Their suits offered decent protection, but it was reasonable to assume that the levels would increase the closer they got to the harnessed star, and no

suit would help them then. Of course, by the time they started to feel any effects from the blistering radiation, it would already be too late. He checked the filters and valves on his suit and then secured the helmet. “You getting visuals back there, Grace?”

“Crystal clear, Captain, from both you and the recon droid.”

“Okay gang, two hours out, two back, and no more than that for safety’s sake. If we get separated, we rendezvous back here in four hours. Understood?”

“Roger that,” came the replies.

He opened the door.

The gangplank descended a couple of steps ahead of the recon droid as it scuttled out.

He followed a couple of steps behind it.

Inhale.

Exhale.

Inhale.

The sound of his breathing filled his helmet with its reassuring hiss as the valve locked and released between the intake of breathable air and the venting of deoxygenated breath. His boots clanged heavily on the metal ramp as he descended.

The others followed behind him.

Devalo scanned the vast bay area for points of egress and, more immediately important, any possible threats.

He couldn’t shake the bad feeling gnawing away at him. He wasn’t a superstitious man, but that didn’t make him immune to the sense of cosmic dread that the megalithic structure inspired.

The only word he could summon to describe the ring’s interior was *alien*. It all looked so familiar, and yet so wrong at the same time.

He sent the scout ahead.

The little droid scuttled away, darting between the hulks of half-stripped fighters. He watched on his HUD, sensors primed to pick up any movement.

There was a thick patina of dust across everything, and there were no prints or tracks in any of it.

He crouched, running his fingers through the dust.

Grace ran the analysis without being asked. "Contains traces of non-human DNA." He nodded. The dust confirmed what they already knew. This place wasn't built by any survivors from his own species, no distant cousins from across the stars. He rose again. The inset image on his HUD moved as the recon droid advanced through the construction. He saw thick chains holding engine blocks a few centimetres above their housing so that engineers could get in at the workings, as though everything had stopped mid-maintenance, tools simply downed. The droid moved on, its collision detectors negotiating the difficult passageways between the work bays with ease. It walked across what looked like a giant wrench that lay discarded on the floor, and then it stopped, looking slowly from left to right.

There were a dozen alternatives and, with no way of knowing which led where, Devolo sent the recon droid down the closest corridor. He divided his boarding party into three four-man teams. "Stay in contact. Take no stupid risks. Understood?"

Nods all round.

They moved out.

The first passage fed into a labyrinth of identical passages, each one branching out into half a dozen alternative destinations with no obvious signage. Upon entering the first few rooms they encountered no more clues as to the nature of the ring's missing inhabitants. The next room was different. The far wall was dominated by a crude mural, which looked to have been carved into the surface with nails. It was rough, like a dying man's message or a cave dweller's painting. Devolo crossed the room to take a closer look at it. It was no sort of portrait. Indeed, there was no easy deciphering of any message in its broad scratches.

"What do you think?" he asked the girl beside him, as Amelia reached out to rest the flat of her gloved hand on the surface.

"A pictographic representation, but abstract, I think, as opposed to realistic. Some sort of prayer to an unseen god, perhaps, or an invocation?"

He stood back to get a better look at the whole shape instead of the close-up detail.

Was she right?

Had this greater race, with its incredible technology so far beyond their own, fallen back on superstition in its last breaths?

Looking at it, he realised she *was* right. There was a figure scratched into the wall above what must have been written language. Was that their god? He studied it. Yes. It was simplistic, but there was something about the figure with its stretched face and huge, deep eyes that was deeply unsettling. He didn't want to think of it as any sort of divinity.

"Can you read any of this stuff?"

"It doesn't resemble any recorded language that I know of, Captain. Though there are some similarities here," she touched a sweeping curve of one symbol, "and here."

"Similar to what?"

"Wardings. Plague markers."

Devalo left the room without another word, following the recon droid deeper into the complex. Again he was painfully aware of the thick patina of dust coating everything.

Every angle in his HUD offered the same views of ancient desolation.

"You seeing anything out there, Nixon? Morgan? Brook?"

"This place gives me the creeps, Captain," Nixon's voice came back. "It's like they were raptured or something. There's tables here with cutlery and plates laid out, the only thing left on them now being mould cultures. There's no trace of any of the inhabitants themselves."

"How about where you guys are, Morgan?"

"Same, same but different. No half-eaten dinners. This place is more like a chapel. There's some incredible iconography. I'm guessing our hosts looked more like crustaceans than lizards, but to be honest they could just be depicting the terror rising from the seas or some sort of cosmic overlords they bowed down to. The whole thing is pretty disturbing, to be honest. There's an

altar deeply stained with what I guess is blood, like they used it to perform sacrifices or something. Seriously, part of me just wants to turn tail and run, Captain. We shouldn't be here."

Devalo wrestled with the same feeling of unwelcome intrusion, but didn't voice his doubts.

And with each step the feeling grew deeper and more unsettling.

"Brook?"

The other man didn't answer.

"Talk to me, Brook."

Still no answer.

"Anyone got eyes on Brook's team?"

"Not us," Nixon came back.

"Morgan?"

"Nope."

"Grace?"

"Vital signs on their life monitors are good," the A.I. came back. "But there is a dust storm gathering between us and your current location, Captain. The cloud is considerably denser across their coordinates, and it is interfering with communication."

"So they're blind?"

"And deaf," she said helpfully.

"Okay, well we'll just have to trust them. Everyone else, sound off. I want to know exactly who can and can't hear me."

Of the seventy-two crew members who'd made landfall, only thirty-six reported back.

They repeated the sound-off every ten minutes as they ventured deeper into the mega-structure, losing more and more voices the deeper they went.

Within thirty minutes the only voices that answered his call belonged to the members of his own boarding party.

He tried to ignore the feeling that some unseen predator was picking them off one by one.

"Dust," he said to himself. "It's all about the dust. Grace?"

“Captain?”

“Can we pinpoint the source of the signal, I mean nail it down to a precise set of coordinates inside this thing? We could be on here for a year and not cover every inch of ground.”

“I can guide you through the recon droid,” she said.

They kept the airways clear as they followed the spider-like machine into what appeared to be a vast vault that was more than a mile inside and countless, treacherous storeys down, deep into the darkness inside the orbital ring. The only light was low-emission radiance coming from the seams of gold that were wired into the walls. The walls down here were lined with more of the plague markers that they’d seen up above; he was beginning to recognise the swirls and shapes without Amelia pointing them out. What he couldn’t understand, not logically, was how they could have the same meaning for some distant alien species; but she assured him that at their essence they were nothing more than simplistic renderings of death and decay, and that was something all species had to share. Nothing was immortal. The inhabitants of the ring had understood the concept of sickness and death, the stripped skull with its hollow, empty eyes. But he wasn’t so sure. It seemed ... too convenient to think that they would think the same way as this ancient civilisation.

He kept that to himself. He didn’t want to contradict Amelia: she was by far the best equipped of them all to grasp anything within these scratchings that was there to be interpreted. If he was just going to ignore her, why bother bringing her along? She’d earned his trust.

What they hadn’t found, so far, were any sorts of computer terminals or means of communication. There were no screens, no keyboards nor anything remotely similar. Of course, their own ship didn’t need any form of kinetic input. He could quite easily command the Terella without doing anything more complicated than vocalising his wishes, so why not the same here?

Which, of course, made perfect sense, but wasn't helpful.

The vault was cavernous.

The air was easily ten degrees colder down here, practically giving the storage area its own ecosystem. The droid crept along, relaying images from the dark ahead.

It was hard to believe that the vault was artificially- made. It had an air of age about it that defied counting. He walked slowly towards the centre of the chamber, seeing the floor beneath the recon droid's clawed feet on his HUD. The droid moved with confidence and speed, relentlessly tracking down the signal. The countdown clock on his HUD had counted down 44:31. It meant that they had seventy-five minutes before they had to turn around, no matter how close they were to discovering the source. Seventy-five minutes was nothing.

The display changed. For a moment it was completely black, and then it lurched alarmingly as though the droid had fallen. The droid took a moment to right itself, and then lurched forward again. It took Devolo a moment to realise that it was negotiating a series of steps down. As the lens righted again he saw that the steps were actually part of an immense inverted pyramid, going deeper and deeper beyond the range of the droid's light. It was a *long* way down. And every step down they took was a step back up that they'd have to take on the way out.

Seventy-five minutes was nothing.

The place was like nothing he'd ever seen.

He wasn't about to turn back until the last possible second. They had a mission and, Grace had said it herself, the mission was everything. As though thinking about her had somehow summoned the A.I., Grace's voice crackled in his ear, but he only caught a couple of the words through the interference. "Mistaken life." He didn't know how they pieced together.

Every step took him closer to radio silence.

Still the recon droid descended.

He wasn't counting the juddering, awkward steps.

Maybe thirty. Forty.

And still it went down.

“At what point do we say there’s no way we’re going down there?” someone asked in his ear.

“Seventy-four minutes’ time,” he said.

“The maths don’t add up, Captain. We’re going to be exhausted climbing back up that slope in full evac gear. What takes seventy-four minutes to go down could just as easily take two hundred to come back up.”

He was right. Of course he was. Devolo needed to factor that in.

One hundred minutes, perhaps?

There was no sign of the droid’s descent coming to a halt.

“Do we go down after it?”

“We go down after it,” Devolo issued the order.

Despite his confidence, they lingered on the top step for a long time, allowing the image displayed on their HUDs to break up with static interference, the relay stretched to the limits of its connectivity.

“Now or never, Captain.”

He nodded and took the first step.

The first ten were easy going, but he quickly noticed that the breadth and depth of the steps were designed for a very different gait to his own. By the thirtieth step his thigh muscles were beginning to burn, stretched to unnatural extension. Still he carried on down.

He counted five hundred and twenty-seven steps when the droid reached the bottom of the descent and the awkward, lurching image levelled out. It was in some sort of chamber, which was considerably smaller than the vault itself. He caught sight of something in the translucent display across his visor. It looked like a huge chest. No, he realised as the droid scuttled closer, not a chest: a sarcophagus. This wasn’t a vault, it was a burial chamber. Up there was just a massive antechamber; this was the focal point of the room. His breath caught in his throat.

“Amelia, are you seeing this?”

The question was rhetorical. Of course she was seeing it. They all were. What he was really asking her was, “Is that what I think it is?”

“A tomb,” she said, confirming his suspicions.

“What’s that on the ground?” another voice asked.

He zoomed in on the shape. As the focus resolved, quickly sharpening, he realised that he was looking at a pair of manacles which were fed through loops, securing them to the side of the huge stone sarcophagus. He counted six more pairs of manacles. Seven sacrifices? His blood ran cold. He couldn’t quite believe what he was seeing.

There were no bones.

But there was dust.

Lots of dust.

Zooming in again he saw his mistake: there were *fragments* of bone, but no whole bones.

How long would it take for a skeleton to degrade to the point of disintegration?

The answer was down to local conditions of course—a corpse could survive relatively intact in a peat bog for five thousand years or more, or it could dissolve down to nothing, stripped by acidic soil, in three hundred years. The atmosphere in the enormous burial chamber was harsh, with abrasives in it that had obviously ground the corpses down. But even so, he couldn’t imagine them having been shackled to the tomb recently. They were looking at some vast tract of time since the ring had been inhabited. Five hundred years? A thousand? Longer? How long could it have taken for the signal to reach Unity?

He asked as much, but the answer wasn’t any more satisfactory than his own musings.

“Yes,” Amelia agreed. “Five hundred. A thousand. Even longer. As for the signal? Yes, it could have taken that long to reach us, or at least for someone to *hear* it.”

“So this is the source?”

“This is what we came looking for.”

“It makes you wonder, doesn’t it? I mean look at it. It’s *huge*.”

And it was huge, easily twice the size that any sarcophagus would need to be to hold even the tallest of those present.

They continued down the last steps and crossed the floor, approaching the tomb with caution.

The countdown on the HUD showed Devolo that they’d eaten through another nineteen minutes of their time on the ring. He figured on double that to get back up the climb. Time wasn’t on their side.

It was pitch black down here.

The only light came from the now-still recon droid’s flashlights and from their suits’ in-built lights, which criss-crossed the darkness ahead of them as they scoped out the chamber.

Devolo knelt before the tomb.

The side panels were decorated with elaborate markings, seemingly venerating the body entombed within. They appeared to be more representational than linguistic, but he was no expert. What he did know with reasonable certainty was that whoever was buried inside had obviously been someone of importance, to be afforded such reverence in death.

He studied the markings a while longer, but he couldn’t make anything out of them.

The image on the HUD flickered, losing focus, and then it sizzled around the edge, some weird interference distorting the image being relayed from the recon droid. It couldn’t be the dust clouds this time because the link was direct, not bounced back to them from the Terella.

He called Amelia forward, wanting her take on the images.

He stood as she knelt, for the first time seeing the top of the sarcophagus and realising that it was transparent.

There was a body inside.

Decay hadn’t taken hold, no matter how long it had been in there. The plains and angles of the creature’s bone structure were utterly alien, as were the huge eye sockets and hairless skull. The

deceased was all skin and bone, sharp angles and deep shadows where its skin hung slackly over its skeleton.

He rested his hand on the glass surface.

He felt a slight vibration running through the tomb, and then all around them the golden threads woven into the fabric of the walls began to glow. At first the effect was minor, offering a little more light, but the longer he held his hand on the tomb the stronger the light grew, increasing in intensity until the threads blazed brightly enough to illuminate the entire burial chamber.

As he looked down Devolo saw that the ground beneath his feet was as transparent as the lid of the tomb, and he could see a floor of stars through the thick layer of dark glass.

The tomb stopped vibrating.

He heard a hiss like a vacuum seal being broken, and then saw cracks running through the glass lid.

“It’s not a coffin,” one of the others said.

They were right. It wasn’t. It was some sort of stasis chamber and he’d just triggered the wake-up sequence.

FORTY

GRACE TRIED TO raise Captain Devolo again, but the cosmic dust between them effectively blocked any communication.

She did not know what to do: the chain of command was broken.

She ran an impossible number of calculations and sub-routines processing all of the possible permutations, but nothing in her programming could cope with the creation of something out of nothing. But that was exactly what they were facing. The ship newly showing on the screens had appeared out of nowhere. That was impossible. It couldn't happen.

But there it was, on every readout, and it was approaching fast. She didn't know what to do.

They were divided. She couldn't flee as long as the crew were out of contact on the orbital ring, and she couldn't fight because the boarding team had taken both Master Cavanaugh's security team and the weapons stock with them, leaving the remaining crew defenceless against any oncoming threat.

She tried again to raise the advancing ship on communication channels, cycling through every frequency and asking the approaching craft to identify itself.

They offered no response.

She could only assume that they were hostile.

But what if it was just a case of her own failure to identify the channel on which they may be simultaneously trying to raise the Terella? That failing fell on her shoulders. They could be a peaceful delegation. But that was a conclusion that demanded a lot of faith from their silent approach.

Independent thought, she realised, was a curse.

She tried again to raise the Captain, but heard only static on the airwaves.

Master Varick had been stripped of his status on the mission when confined to the brig, but despite his confession he was yet to be found guilty by his peers. Without sentencing he was, technically, the ranking officer on the Terella, or he would be if he were to set foot outside of the brig.

But she couldn't release him, could she?

The smaller ship had similar markings to the derelict ship with the skeletons on it, though the markings were miniaturised, and with two distinct laser turrets at the front. It came up close to the Terella, locking on.

It hadn't launched an all-out attack: no weapons had been engaged or even primed. Surely that had to stand for something? Perhaps they were not hostile. Then why not request permission to board, rather than simply drift up alongside them and lock on?

It was too late to take evasive action.

They were breached.

Through the cameras she saw the creatures come spilling out of the smaller ship, spreading like wildfire through the lower level until they came up against the first crew members.

It was carnage.

She recognised the engineers from Mistress Watt's team by IDENT number, seeing them engage the intruders only to be set upon tooth and claw, ripped apart by the three lizard-like intruders. There was no escaping their nature now, or the purpose of their boarding. For skin they had scales, all the better to sluice away the blood of their victims, and they had deep nostrils to draw down scents and so hunt tender prey. Each had distinctive markings, too, almost like tribal tattoos on their scales.

Grace sounded the alarm.

Sirens tore through every deck of the Terella. The lights cycled in time with the alarm, ensuring that no one could mistake or ignore the wailing sirens.

It didn't make a blind bit of difference to the intruders. They tore through the corridors with ruthless efficiency, setting upon each and every crew member they came into contact with.

She sent a ship-wide broadcast warning the crew not to engage with the intruders.

But there was nowhere to hide.

Her archives were filled with accounts of every major conflict and smaller skirmish from Unity, with volumes of data on military strategy and holographic simulations of some of the worst battles. She understood combat techniques and the martial arts with pinpoint precision. It didn't matter. The power of thought allowed her to imagine the worst, her logic circuits extrapolating the attack in ways that the humans simply couldn't because she could run so many processes and simulations concurrently, recall ancient conflicts, and more. Grace's circuits locked in a spiral of computations that were nothing more than one incredibly complex rabbit hole for her to disappear down. She didn't know what to do.

And every moment of hesitation led to more death as the intruders tore through the lower levels, oblivious to the shrill sirens. They moved with purpose. That purpose, she realised, was no more complicated than to purge the Terella.

Without weapons, the crew couldn't fend them off.

It was slaughter.

Grace did the only thing she could.

FORTY ONE

RO VARICK'S CELL filled with the caterwauling alarm.

The lights flickered and then went out. For a moment there was only darkness, and then the emergency strip-lighting came back on, bathing everything in a macabre crimson hue. He didn't move from his bunk. He sat with his knees up, chin resting on them, arms wrapped around his shins, listening. He had no idea what was happening out there. He found it hard to care. His life could be counted out in moments now, most of them already used up. What difference did losing a few more of them make? If the ship went down now and they all checked out of life, was it really so much different from pitched out through the airlock in a cycle or two? The end result was the same, wasn't it?

And then he heard Grace's voice telling the crew not to engage.

It wasn't long until he heard the first screams.

"Grace? What's going on out there?" he asked, but the mainframe didn't offer an answer. He hadn't expected one. He was a non-entity in the machine's eyes. He didn't hold a rank as long as he was in here. He'd forfeited all rights to access her databanks or make requests of her. His only option was to sit there and wait for whatever was happening to play out. That didn't stop him from pushing himself up to his feet, crossing the cramped cell to the door and pressing his face up against the toughened safety glass. He couldn't see anything beyond the empty chairs where his guards had been keeping watch the last time he looked. He was alone. "Grace? Please. Talk to me."

The cell was colder than a machine's heart, he thought, wrapping his arms around his belly. He hadn't realised just how cold

it was before. Given the order not to engage, it was reasonable to assume that there were hostiles on board. Was Grace dropping the temperature to impede their progress? It couldn't be a coincidence that the cell was colder than the surface of an ice rigger.

Extreme cold brought about lethargy in many species.

It wasn't a bad move, at least theoretically. Of course, it had every chance of leaving the crew suffering just as badly from the effects of hypothermia, so maybe it was the intruders' doing, not Grace's? What if they thrived on the cold? What then?

He remembered the reptilian remains on the death ship.

Reptiles were cold-blooded by nature.

"I can't order you to talk to me, Grace, but I can help."

The only answer was the cycle of the siren.

"Let me help. Please. Let me make amends. Let me prove myself to you. Read my biometrics. I'm not lying. I want to help. Whatever else, this is my one and only life. Don't keep me in here. That's passing sentence on me. Let me fight for our ship. Please, Grace."

The cell door opened.

"Thank you."

The A.I. didn't talk to him until he stepped out of the cell.

"What do you need me do?" he asked.

It was a blanket question, and the answer was every bit as general. "Save us."

It was a starting point, though.

"What am I looking at?" he asked.

"We have been boarded. Six hostiles are working in two teams of three to sweep through the ship."

"Six against two hundred and seventy-three? What's Devolo playing at? Just crush them and be done."

"The Captain is not on board. Neither are any of our martial forces. They are exploring an orbital platform. It is the source of the signal we have been following."

"Then get them back here."

"I lost radio contact with the landing parties over thirty minutes ago."

“You’re not making this easy for me, Grace. Weapons?”

“The ammunition store is empty. The entire arsenal was utilised by the boarding party.”

“How’s it looking out there?”

“It is a slaughter, Master Varick. I do not know what to do. I cannot think ...”

“Okay, we’ll you’ve got me now, Grace. We’ll get through this. What do we know about the boarders?”

An image flashed up on a vidscreen in the passageway. The thing onscreen had been ripped straight out of his nightmares. It was a physiological match for the lizard-tailed skeletons they’d encountered on the death ship, but clad in meat and scales it looked bestial—but for the savage intelligence glittering in the reflection of its eyes.

“What is that thing?”

“One of the six invaders you have to kill with your bare hands,” the A.I. said, and this time he was absolutely sure she was playing with him. She’d learnt humour during the long flight, and her preferred personality had developed a strong grasp of irony and sarcasm.

“This isn’t the time for jokes,” he said.

“I promise not to joke,” she replied, deadpan.

“You can go off someone, Grace, do you know that?”

“They have killed eighty-three crew members. No. Eighty-four,” she revised, as another IDENT chip went dead.

“Where are they?”

“One kill team is approaching the medlabs, the other is moving for the bridge.”

“First things first: get out of there, Grace. I don’t care where you hide—in a linen closet if it comes to it—but keep your head down. I can’t afford to lose you. You’re my eyes and ears here. If I’m going to kill six of *them* with my bare hands, I need all the help I can get.”

The medlabs were closer to the brig than the bridge was.

“Did Deacon go down to the ring?”

“No. He is in the medlab.”

“Patch me through to him,” Varick said, already running. When Deacon’s voice crackled through the air, Varick took a calculated risk: the lizardmen might be fearsome, but they couldn’t be all-seeing and all-knowing. The likelihood of them understanding English was zero, or as close to zero as made no difference, so he spoke freely. “Deacon, they’re coming your way.”

“Tell me something I don’t know,” the other man said.

“I’m on my way.”

“Okay, that’s definitely new information, I’ll give you that. What do you want me to do?”

“I’m going to poke them. I’ve got an idea. It’s probably a bad idea. Grace, can you change the atmospheric balance in the arboretum? Pump the place full of oxygen. I’ll draw them in there. The hull shielding around the growth chambers ought to be enough to withstand the blast.”

“You’re going to burn them?”

“Don’t see what choice we’ve got.”

“Are you forgetting the fact that there are two kill teams, Master Varick?”

“Nope. While I’m leading one team on a merry dance, someone else is going to lead the other team down to the woods. Any volunteers?”

“If you’re expecting me to put my hand up, you’ll be waiting for a very long time,” Deacon’s disembodied voice countered.

“That’s fine. I’ll get the first group to the trees, you get them lost in there. I’ll draw the second lot down while you’re doing that. Suit up. The air in there is going to be seriously tough to breathe.”

“I’m a scientist,” Deacon said. “I know what pure oxygen does to the lungs.”

“I’ll be at your door in about ninety seconds. Be ready.”

He hit the stairwell hard, not slowing for a second as his feet tripped over themselves in a dance that took him up one flight after another.

He knew how slim his chance of success was—he was running towards his own death, but maybe that wasn't so bad. He'd find redemption in dying to save the others.

"I can live with that," he said to himself, and burst out laughing at the ridiculousness of the statement. His laughter echoed through the core stairwell, spiralling up and up hysterically.

There was no hiding his presence after that.

But then he'd had no intention of hiding.

He heard the screams before he saw the creatures.

The blood-curdling cry froze the muscles in his legs, tying them up. He stopped dead in his tracks, staring at the three reptilian aliens, the blood of his crew on their claws and dripping down the strings of meat torn off and caught in their incisors.

The front one looked up from its kill, catching him in its terrifying gaze. It said something, though the sounds were nothing like words. He couldn't take his eyes from its wickedly curved tail as it lashed about behind the thing. His nostrils filled with the scent of blood and spilled guts. The thing made more guttural noises, its forked tongue lashing, and the huge reptile clambered over the corpse it had just made, coming for him.

Varick backed up a step. It was too soon to run.

"I think it's safe to say they've got my scent," he said, not knowing if anyone was still listening. "I'm drawing them away from you, Deacon. Don't make me regret this."

"On my way," the other man's voice came back.

He looked left then right, seeking out a place to bolt even as he backed up another step.

The creature came on, first one cautious pace and then another, its claws striking the metal floor. It rocked back on powerful legs, and then launched itself at him.

Varick threw himself to the left. Even as his hands hit the floor, he scrambled back to his feet and ran for his life.

The spiralling light and wailing siren left him dizzy and disorientated.

Behind him, he heard the scratch of claws chasing him down.

He ran hard, not looking back.

He didn't dare break his stride or hesitate, knowing that at any second a reptilian claw could burst out of his chest and skewer him through. His shoes slapped against the metal, the echo fighting with the siren to be heard.

Halfway to the arboretum his lungs were on fire.

"Tell me you're on your way," he gasped, only to be answered by a huffing and puffing Deacon.

"Can't talk. Running."

In the reflections up ahead dark shapes loomed over a much smaller reflection of Varick.

They looked like they were right on top of him.

There was no way he was going to risk a glance back. Gritting his teeth, he powered on, forcing his legs to move, even faster, through the burning in his muscles. His head was light and his balance precarious as he lunged at the stairs, grabbing the rail even as he jumped, not bothering to run now. He hit the platform below hard, his legs buckling beneath him as he came down, but the insane leap had bought him precious seconds. He could see them above, still coming, relentless in their pursuit. That was what he needed.

"Come on, come on," he rasped, pushing himself to run again, finding strength he didn't know he had.

He made it down to the arboretum's level, stumbling as he left the core stairwell.

Grace hadn't announced another fatality in the last couple of minutes.

He took that as a good sign.

He forced himself to accelerate through the fire in his lungs, harder, arms and legs pumping furiously as he hit the first set of double doors running. The sirens were louder down here. Shrieking. They weren't warning of intruders; it was the air. He could taste the difference long before he reached the double doors that fed into the arboretum and, deep inside that sheltered room, the woods. He hit the doors running, slamming his palm against the lock-release.

The trees parted before him.

He didn't look back.

He ducked under a low-hanging branch, and then spun on his heel and took off to the left, darting between the thick boles of the towering trees. Leaves whispered in his wake, and beneath that sound was the hiss and click of the lizardmen's mocking calls. They were the most threatening sounds he'd heard in his life.

He looked back.

He couldn't help himself.

The nearest of the creatures loosed a shrill bark as it puffed out its throat, opening its gills and spreading a huge brilliantly-coloured frill around its head that made the already terrifying alien so much more frightening.

He stumbled but didn't fall, reaching out with his right hand to push off against the nearest tree as he darted to the left, and then to the left again, working a wide arc around the inner sanctum. The oxygen burned in his lungs, the exertion leaving him struggling to breathe. He couldn't stop. Not yet. He needed to get all of them in here. And then what? How was he going to conjure the spark to light the place up?

He hadn't thought that far ahead.

Every fire needed a spark to start it. The increased oxygen content in the air wouldn't spontaneously combust ... and somehow he had to get himself out of there before the whole place went up in a fireball.

As he emerged from the trees he saw Deacon and three more lizardmen between him and the doors.

"Any bright ideas, Grace?"

"Try not to get yourself killed," the A.I.'s voice filled the great vaulted room.

He didn't have anything else to add to that.

Think like an animal. Do what they do.

Varick raised his arms, making himself large, and charged head-on at them, shrieking what he hoped was an intimidating war cry.

Meanwhile Deacon threw himself out of harm's way and scrambled back through the door, feet kicking out uselessly as he tried to force his body to move faster than it could.

"Close it!" Varick yelled.

Deacon hesitated.

"DO IT!"

Deacon hit the control panel with the flat of his hand.

It responded immediately.

He hadn't exactly done his job; it was all backward. Varick was meant to be on the other side of the door, Deacon was supposed to have lured the second team of aliens into the trees. But it would work. It had to work. It was all on Varick now.

As the doors whispered closed, sealing him in with the intruders, he had a single thought: how to get to the door release mechanism. With three of the lizardmen fanning out to face him while the other three charged at his back, Varick found a burst of speed and, as the first claws slashed out towards him, he pivoted on his heels and spun, rolling off the challenge without slowing a beat. He rode the alien's lunging shoulder, lifting himself off the ground as the lizard's shrill cry tore at his eardrums, and then he was on the other side with nothing between him and the closed door.

Through it, he saw Deacon move to trigger the release mechanism and barked "Don't!" before the man could open the doors.

He had seconds before they were on him.

Every fire needs a single spark.

He had an idea.

Maybe he'd even find redemption in it.

He drew his left fist back—the real one, not the prosthetic—and slammed it into the palm reader beside the door. He was out of position, off balance, because the readers were designed for right handers, but it did what it had to do: the glass fragments bit deep into his skin and the pain was blinding. He couldn't allow it to slow him down. He could hear them behind him. He could smell them, with the sickly-sweet aroma of the blood of his crew

on their scales. He repeatedly slammed his fist into the glass of the palm reader, breaking through to the circuitry beneath, and reached in. Jagged splinters tore through the back of his hand, deep enough to give him a glimpse of bone. He pulled out the wires, wrenching them out of their couplings.

He only needed a single spark.

Through the door he saw Deacon screaming a warning at him. He couldn't hear a thing above the sirens and the shrieks of the lizards.

The sudden burst of pain was excruciating. It came from nowhere and was all encompassing. He looked down to see claws burst out of his chest cavity, ripping him open.

Varick was dead, but in the precious seconds it took for his brain to understand that fact he still possessed motor skills. They weren't fine motor skills. There was nothing precise about it. It didn't need to be.

The stripped-bare wires touched in a shower of sparks.

"Goodbye, Grace," he said. They weren't the most powerful last words, but that didn't matter because there was no one around to hear them. Even the mainframe couldn't decipher them through the huge roar of the detonation as the oxygen ignited, or through the raging flame as the fireball tore through the arboretum, scorching and shrivelling every leaf and branch, buckling and blistering the tree trunks and devouring every living thing trapped within the sealed chamber. The fire was voracious, its appetite unquenchable.

Ro Varick burned.

He didn't care. He was already dead. Redeemed. Grace could add one more to the death toll, but in that one addition he had saved so many others. That was enough. It had to be.

FORTY TWO

THE ALIEN OPENED its eyes.

Devoló stared down at it, his hand still resting on the glass lid of the coffin.

“Help me get this thing open,” he said, already putting his back into levering the heavy lid off of the stasis unit. Even through the evac suit’s ventilation he could smell something, could smell the peculiar tang of some chemical component that he didn’t recognise.

The alien’s mouth moved, but no words came out.

It was struggling to breathe, he realised, and redoubled his efforts.

“Don’t try to speak. It’s okay. It’s okay.” He tried to reassure the trapped creature, and then barked at the others to help. His tone spurred them into action. Even Amelia put her shoulder into the effort, pushing with every ounce of strength her small frame possessed. It took a minute, but finally they broke the vacuum seal and, with the unit’s integrity breached, slid the heavy lid off and onto the see-through floor.

The alien didn’t stir. It was naked and anatomically similar to a human male, but on a much larger scale. Its limbs, he saw, were withered and weak. He could place the odour now: putrescence. Sickness clung to the thin being like a sheen of sweat.

Even as the thought crystallised in his mind, he saw images of dead and dying blossoms in his mind’s eye. They were vivid, every feature sharp. Alive. In his mind he saw that this had been a thriving base, filled with thousands upon thousands of aliens like the one they’d found, but then the White Death had come.

He didn't understand how he could know its name, or at least an English term for it, but the words were inside his head. They were gone, all of them. He felt the overwhelming surge of loneliness, and knew that he was face-to-face with a being who was the last of his kind.

And the sickness was in him.

He didn't understand how he could know any of this, but he did. He was absolutely sure of it.

There were no words, but the flood of images and emotions was relentless.

He felt the anguish of each recollection as the fate of the orbital ring was made known to him through the memories of the alien. He pictured the days before when he had been playing with his daughter, the light of his life, and knew the fear he'd felt as the sickness touched first her mother then his little girl; he knew how he had prayed it would take him. But it didn't. He lived while everyone he loved slowly withered and died. The first sign of the White Death was a ring of pustules around the victim's mouth, like a ring of white roses that eventually opened and wept, and when they did open the fever followed. It was never very long after that. Days, or a week at most. Strength fled the body. Muscle mass withered. The White Death leached nutrients from the marrow in the bones, leaving a brittle skeleton that couldn't support the weight of flesh it had to carry. He saw bodies in the passageways, fallen, slumped, too weak to move towards their own beds to die. He saw fear and panic in those who weren't exhibiting the symptoms and inevitably watched them flee the megalith. He knew they did not understand that they were carriers and that the White Death couldn't be allowed to gain purchase in other systems. There were no screams to haunt him this time as those fleeing were shot down while trying to make good their escape. It was for the greater good. The sickness had to be contained. They couldn't risk coming into contact with others before a cure had been found.

He had no concept of time.

The star in his mind was vital and alive, its power harnessed to fuel the ring structure.

How long did it take for a star to collapse and die?

That was the only clue to how long the thin being had been alone in here, unable to die.

The weight of the images in his head was overwhelming.

Devolò felt himself drowning beneath them.

There was a moment when he lost all connection to himself, swallowed by these new memories that weren't his own.

He felt himself sway, his legs buckling beneath him, but instinct—muscle memory—had him reaching out before he collapsed.

It was all too much.

The images kept coming in waves.

“Enough!” he gasped, bending double, hands going up to claw at his temples. “Get. Out. Of. My. Head!”

And they were gone. Just like that. The contact was broken and he was alone inside his head.

They had found the source: the stasis chamber. The beacon called out to any that might hear it, and embedded in the broadcast was a plea to bring with them a cure for the White Death. The sickness was still inside that temporal tomb and, now that the seals were broken and time was stealing back in to wrap itself around him once more, the alien was dying again.

Devolò knew all of this as well as he knew his own name.

And he knew so much more—he just couldn't understand it. There were treasures beyond gold and diamonds in this life: culture, the wisdom of this lost civilisation, and even the learning and scientific genius capable of harnessing a star. And all of it was on the verge of extinction if the thin being—Mahalac, that was his name, though the sound of it was guttural in his mind with the emphasis on the *lac* at the end—didn't make it.

“We've got to get him to Deacon, fast. He's sick. The stasis unit kept whatever's killing him at bay, but now it's free to consume him again, and it's *hungry*. You two, make a stretcher out of

your weapons. Amelia, run ahead, get a message to Grace. Deacon needs to be ready. If we screw this up we lose access to everything he knows.” It wasn’t the most inspirational speech, but his crew responded, the two grunts stripping down their weapons and using material ripped from supply kit bags to fashion a makeshift stretcher to bear the dying alien between them. Meanwhile, Amelia took off up the stairs at twice the speed she’d come down them.

He climbed beside the makeshift stretcher, his hand on Mahalac’s shoulder every step of the way. In case the contact re-established their telepathic link he tried to only think soothing, reassuring thoughts, picturing Deacon and the medlabs and promising the alien that they would find help there. It was all he could do to keep the thought that it was almost certainly an empty promise out of his mind.

FORTY THREE

“FIRE.”

It was the only word that came through the comm-link, an almost onomatopoeic crackle that was utterly terrifying.

The summit still seemed so far away.

Every muscle burned. “What? What did you say? Grace?”

But Grace was gone, whatever twist of fate that had allowed him to catch that single word mocking him now with its silence. “Grace? Talk to me, Grace.”

When she still didn’t answer, Devolo pushed himself on, faster, struggling with each steep rise. He thought that he didn’t have it in him. The climb to the top was brutal. The rarefied air in the suit was so thin that it physically hurt to breathe. Still, he found the sheer force of will to rise a step, and then another, never looking down. His head swam with the afterimages of Mahalac’s connection. It was disorientating. It was almost as though he could see the faces of the dead aliens across the visor, not inside his mind.

“Come on. Come on. Come on.” He could have been talking to Grace or berating himself. His words, repeated over and over until they became a dull mantra, drove him on until he stumbled up the final steps, burning through the precious little oxygen left in his tank.

At the top he sank to his knees. There was nothing he could do to stop himself. His legs just gave out beneath him.

Amelia was already long gone.

He couldn’t speak for the longest time.

Finally he found his voice, saying the android’s name again. “Grace? Grace?”

Silence.

“Can you hear me?”

He pushed himself back to his feet, turning to look back down the inverted pyramidal stairs to where the others were emerging from the darkness with Mahalac on the makeshift stretcher between them. The spider-like recon droid matched them step for lumbering step. He turned off the HUD, because the effect of layers upon layers was dizzying. He focused on heading back the way they'd come. He had, by best estimate, maybe fifteen minutes of spare oxygen at the rate he was gasping it down. He needed to regulate his breathing fast.

“Grace?”

“We have a situation,” the A.I. said directly in his ear. It was so good to hear her voice. He never thought he'd be relieved to hear from an android, no matter how advanced her personality, but it seemed his life was all about unexpected turns these days.

“Report?”

“Intruders boarded the ship while you were out of contact. The situation has been contained, but with considerable losses.”

“You're frightening me, Grace.”

He had a minute, no more, until the others were up into radio range.

“Casualties?” One word, and it was a loaded question.

“We have lost eighty-nine crew members, Captain.”

He closed his eyes.

He didn't have the words to express what he felt at such a matter-of-fact delivery of such soul-crushing news.

“It could have been so much worse,” she assured him. He drew no comfort from her words.

“What happened? Tell me everything, Grace.”

“Scavengers must have followed us from the death ship, cloaking their presence in our slipstream somehow. They decloaked only after we had lost radio contact. With no weapons, we were helpless to defend ourselves from their attack. They slaughtered everyone who went up against them. I am sorry, Captain, I did

not know what to do with no ranking officer on board to make the call. So I released Master Varick.”

“You did good, Grace. Let me talk to Ro.”

Silence.

For a moment he thought he’d lost her again, and then he realised what her silence meant.

“Master Varick drew the intruders into the arboretum where he had laid a trap.”

“He’s dead, isn’t he?”

“He lost his life ensuring that the rest of the crew remained safe. The good news is that the fire in the arboretum is now contained, but the forest is gone. Nothing survived the inferno.”

“Who’s there with you? Deacon?”

“Master Deacon was with Master Varick—”

“Please don’t tell me he’s dead,” he thought of Mahalac and the one chance they had of saving the alien.

“No. But he is struggling to come to terms with what he witnessed, Captain. The slaughter.”

“And he’s out on the other side of it,” Devolo said, knowing that the others could hear him now. “We’re coming back. We’ve got a survivor from the megalith here. He’s in a bad way. We need Deacon’s whole team prepped and ready. We need a miracle.”

“You’ve got me,” Deacon’s voice came over the airwaves. “That’ll just have to do.”

FORTY FOUR

IT WAS IMPOSSIBLE.

Deacon stared at the microbial images through the lab scope. The White Death was unlike anything he'd ever encountered. Medically, it was a miracle. But of course it was always going to be, wasn't it? Why should an alien species exhibit any of the familiar traits of sickness, or a breakdown of their blood on a cellular level, in anything *approaching* the medicine he'd spent his life studying? It was only ignorance on the humans' behalf that gave them the arrogance to think that they could save Mahalac, when the brightest and the best of his own species had failed. Theirs were scientists capable of harnessing an entire star and bleeding it dry to fuel a space station. What was he? Second *human* choice. Not even the best that Unity had had to offer. Next to the beings who had tried and failed to save Mahalac's life, he was a child.

It didn't even look like blood.

He closed his eyes and sank back into his chair.

"I can't do this. I just can't."

There was no one there to disagree with him.

He was painfully aware that he didn't have time to learn, either.

Beneath the microscope he could see the White Death mutating, the antibodies in the alien's blood being beaten back by the relentless adaptation. The antibodies were always a fraction behind the assault. They were reactive rather than proactive, of course, and by the time they started to gather to fight one threat that threat had mutated into something quite different, leaving the host body's defences flailing at something that wasn't there

to be hit. As far as viruses went, it was brutally efficient in the way that it stripped the host of hope.

All he could do was try the vaccines they had, pitting them one at a time against the White Death to see if any human sickness could impact on the structure of the plague. Time and again he tried and saw nothing change. The specimen barely reacted to the presence of the vaccines, and nothing he tried slowed the relentless stripping of the healthy cells from the blood. Diphtheria. Hepatitis. Meningococcal. Pneumonoccal. Polio. Rabies. One after the other. HPV. Rotavirus. Tetanus. Typhoid. Tuberculosis.

The next pipette was marked “Smallpox.” He drew a single droplet of the vaccine and dropped it into the centre of the blood splash on the petri dish.

The effect was immediate: the blood shrank back from the clear drop.

He tried to think what the difference was between this and the other vaccines he’d tried thus far, and all he could come up with was the fact that this was a live vaccina virus, not a dead one like many of the others.

He put the slide under the microscope and watched a dance unlike any he’d ever seen, as the vaccine interacted with the White Death. It didn’t *win*. It didn’t eradicate the virulent cells. What it did, he realised after watching for a full ten minutes, was hold it at bay. That was more than any of the others had managed. Ten minutes became twenty, and twenty became thirty.

He counted down an hour, and the vaccine was still holding the White Death at bay.

An hour wasn’t much, but it was something.

It was worth talking to someone about, but there was no one on board really capable of understanding what it meant apart from the victim himself—the one being with whom he couldn’t communicate.

Mahalac lay on two gurneys placed end to end: he was that much taller than a normal human.

Deacon placed a hand on the dying alien's chest and was rewarded by a flickering of intelligence inside those failing eyes.

"The Cap tells me you talked to him in pictures. I don't pretend to know how that worked, or how I'm supposed to put pictures inside your mind, but I need to talk to you in a language you understand. So, whatever it is you do, do it."

He closed his eyes, picturing the patterns the vaccine made in the blood and willing the alien to understand.

Mahalac offered no sign that he did understand.

"I can't do this alone, big guy. You've got to meet me half way."

And so it was for hours, Deacon trying to communicate with the alien without a mutual language. It was futile. Frustrated, he gave up and left the alien on the gurneys. The sores around his mouth had begun to blister and burst—a sign that the White Death was progressing into its final phase. Mahalac wouldn't be with them for long.

But what could he do?

He wasn't a magician; he was a scientist. He could only work with what he had, and what he had was a vaccine which on first impression seemed to stem the relentless tide of the White Death, even if only for a short time.

He monitored the blood on the slide.

For a full twenty-four hours it held back the constantly mutating virus, preventing it from engulfing the healthy oxygenated cells. It offered life for a day.

Life for a day.

He let that sink in.

What he needed to do, he realised, was manufacture a variant of the vaccine that could be used as a daily booster, to protect the alien's natural defences. After that they'd just have to take it one day at a time, just like they did with everyone else.

The door opened behind him. He didn't look up.

"Is he here?" It was the Listener, Amelia. "The Captain suggested I spend some time with the alien, see if my linguistic skills and anthropological studies help to fashion some form of dialogue."

“Through there,” Deacon said, not looking up from the slide.

She went through, closing the dividing door between them to give him some privacy.

He wouldn't have the luxury of sleep until he'd done what he set out to do or until his patient had died, whichever event won the race.

FORTY FIVE

AMELIA DIDN'T MOVE from his bedside.

Mahalac took the shot from the vaccine-gun as it delivered the serum directly into his veins. He could feel the effects almost immediately, the veil of soft confusion that had been thrown over his thoughts by the White Death lifting gradually and the world around him becoming clearer as he found a way to remain attached to it.

His skin felt cold, clammy. His breathing laboured because the air in this place wasn't right. It was too rich for his lungs, like a drug. He held Amelia's hand, letting the contact guide him as he slowly sifted through her thoughts. Hers was unlike the first mind he had touched. Her thoughts were flights of fancy, whereas the first mind had been filled with practicalities. She was melancholy, still plagued by losses, where the first was driven to ensure that there were no more losses. Mahalac focused on the way she identified things in her own mind. Her thoughts were structured in a peculiar manner. She often had different words attached to any one thing, making it difficult for him to develop a full understanding of their language. But he had time now to listen to her thoughts while resting. It was not unpleasant to be inside her head. He found himself learning a great deal about his saviours.

As he gradually began to understand more and more of the images—and the thoughts behind them—in her mind, he began to grasp the nature of their mission, their search beyond the edge of the stars they thought of as Known Space, and their hope that somewhere out there they would find a new home world because the resources of their own were all but spent.

“Thank you,” he said, speaking his first words in her tongue.

Amelia nearly jumped out of her skin. Then, after the initial shock, she offered him a smile and soothed him. “You understand me?”

“Slowly.” It wasn’t quite the right word, but she seemed to understand what he meant. Then, sitting up, he tried to find the words to say what was on his mind. “Show me the worlds. Please.”

She looked at him. She clearly did not understand what he meant, so he cheated. He pushed into her thoughts to draw out the memory he’d found of an old man and her together, seeing for the first time an incredible projection of the stars, with blue veins of light in the room linking swirls of galaxies and pin-size points of planets. In the memory, the old man pointed at one swirl, and then another and another.

Mahalac found the word he was looking for. “Goldilocks,” he said. She seemed to understand then.

“Are you strong enough?”

“Strong.”

“Okay, okay, well, if Deacon tells me off, I’m blaming you,” she said. He didn’t really understand what she was saying but she helped him out of bed. He leaned on her as they walked towards the door, his head swimming with images and memories he was unable to detach himself from. He was inside her, and something about Amelia wasn’t letting him go. This was different. Wrong. It wasn’t meant to be a snare. He was frightened of what might happen to her if he pulled free. Would he tear parts of Amelia’s mind apart in the process of withdrawal?

She led him into the medlab.

“What the hell do you think you’re doing, girl?” Deacon barked, dropping the petri dish and pipette even as he wheeled around to usher them back into the quarantined room that had been Mahalac’s prison since he’d awoken.

“Strong,” he said again, but Deacon didn’t care that he’d mastered a word from his tongue.

“No, no, no. Get back to bed. Exertion is only going to make your heart rate race, especially in your weakened condition. That’s going to accelerate the deterioration of your blood. I’m trying to say you’re killing yourself *faster*. So, bed.”

“Goldilocks,” he explained, “I give you ... world.”

“What the hell is he going on about?”

“He was in my head and showed me the star charts,” Amelia said. “I think he knows what’s out there, in the emptiness beyond the edge of Known Space. I think he wants to show us.”

Deacon took a glass vial from the lab bench he’d been working at and slotted it home into the booster gun. “I’ve been working on something,” he explained. “A refinement on the vaccine. I don’t know if it’ll work any better, but if you’re going to insist on being an idiot—” he was talking to the alien, not Amelia, “—then I’m going to pump you full of this stuff and hope to hell it works.”

Mahalac offered him his flesh, allowing Deacon to fire the booster into him with a jolt akin to a lightning strike.

He straightened up and allowed Amelia to lead him through the ship.

There were voices everywhere. He’d seen glimpses of what these people had lost when he touched their minds. Not just the home world they had left behind, but the friends they had lost on the way. He followed her to the Library where Devolo and Grace waited for them. Deacon must have sent word. It wouldn’t have been difficult for them to beat Amelia and Mahalac to the room: he moved like a three-legged dog hobbling awkwardly along.

The star map filled the space between them.

He reached out to touch one of the stars, only to see it shimmer beneath his fingers.

He manipulated the chart easily and moved it to its most distant edge, which was a point not so distant from where they were. He turned it and turned it about, and then sent it sweeping through a swirl of stars the other way, zooming in and in on the image until the tiny moons and satellites filled the space between them. He pushed on, charting more and more of their

discoveries, until he'd found what he was looking for—a gap in their knowledge.

“Here,” he said, struggling with the concept, willing them to understand. “Goldilocks.”

“Show me,” Devolo said.

“Better,” Mahalac told him. “Come.”

“Where?”

He didn't have the words. Instead, without permission, he pushed the image into Carson Devolo's mind, showing him the navigation suite teeming with life as it had been so long ago, and the chair where the navigator sat, hooked into the data core.

There was so much that his people took for granted which his saviours had no concept of. So much to learn, to see and explore, but if they didn't rescue it all from the ring before the star collapsed and brought it crumbling down, it would all be lost for good. He willed the captain to understand. When he didn't, Mahalac planted a nightmare inside his brain, which resolved into the final collapse of the star and the destruction of the orbital ring as, piece by piece, it was drawn into the black hole at its core until nothing remained.

“Understand?” he asked. “Time. Everything.”

Devolo nodded. “I think so. It's all on there, isn't it? Everything your people knew. Discoveries we are centuries from making. And whatever's holding the star in place is failing. That's what you were showing me isn't it? Everything is coming undone.”

Mahalac nodded.

“I understand. I do. It wasn't only the White Death that was wiping out your people. That just accelerated things. The world you were living on was dying, just like ours. When it's gone, everything you knew is gone with it. Including your species' knowledge of the stars and the planets out there, beyond what we know of space. Without the maps of the stars your people made, we'll be looking for a new home blindly.”

“Go now,” Mahalac said, willing the man to understand that he knew of a world that they could call home, but without the

on-board computers of the massive navigation station on the ring it would be lost to them.

“We need to put together another landing party,” Devolo said.

“No,” the alien shook his head. He towered over the man. “No air. Too far. I go.”

“You’re not strong enough to go alone,” Amelia objected. Mahalac hated his limited vocabulary. He lacked the words to argue his case, but he had to make them understand. He could go alone. He wasn’t dead yet, and if he died trying to save them ... well, then that was one good deed on his blackened soul. It was a start.

“I could go with him,” Grace said, breaking her silence. “I don’t need air.”

Mahalac looked at her, trying to touch her mind—but she did not have one, or at least not one upon which he could intrude.

Curious.

He tried again, teasing at the edges of consciousness for the threads of personality, or the thing that the priests of his people used to call the “essence.” But it was not there. “Dead?” he asked, trying to phrase the concept that was far more subtle than any i/o problem.

She shook her head. “No, very much alive, but not in the way that you might think. I am every bit as alien as you, Mahalac,” she told him. “But in place of blood I have circuits and biochips. This is me.” She spread her hands wide, encompassing the whole room, the whole deck, even the whole ship. When he still didn’t understand, she brushed back her hair and showed him the data port.

“Yes. Yes. Good. You come. I show you *everything*. You remember.”

FORTY SIX

THEY WALKED TOGETHER in the endless dark.

Neither needed more than the failing golden threads laid into the walls to guide them. For one of them, this place had been home for millennia; for the other, sensors far more potent than sight compensated for the lack of light.

Grace followed the alien, trusting him to lead her to where they needed to be.

Her sensors recorded every slight fluctuation in the stability of the orbital ring, and the longer they walked the more frequent and alarming the fluctuations became.

But she had her instructions.

The mission was everything.

So she followed him.

Even from the different access point, entering much higher than the previous boarding teams and into what appeared to be the city-proper amid the stars, they walked for nine hours, Mahalac not stopping once for water or nourishment. He was stronger than he appeared, or perhaps Master Deacon's vaccine was more efficacious.

"Soon," he said, as though reading her mind.

She said nothing.

He led her down corridor after corridor until finally they came to a stair like no other. It rose higher and higher, and yet higher still. She couldn't see an end to it. Where the burial chamber had plumbed the depths of the city, the stair before her rose a thousand steps and then a thousand more. The walls around them were no longer black but clear glass, giving the impression that

they were climbing through the starry sky itself and all the way to the summit—the navigation suite.

In the centre she saw a throne-like chair, the navigator's seat, and above it a crown of barbs every bit as wicked as any natural thorn.

"Sit," he told her, then said something in a tongue she did not understand.

The chair responded to him.

No, not just the chair. The entire chamber answered to his voice.

Lights came on and symbols were conjured in the air around the navigator's seat. They might have been some arcane zodiac, or—just as probably—booting instructions telling them to please wait, as the system so long dormant came online.

"Sit," he said again.

She did as she was told.

He came around behind her and slowly lowered the crown into place, brushing aside the locks of hair covering the nape of her neck to access the data port. She felt something slide in and lock. It wasn't a cable: it was oleaginous, a tentacle that reshaped itself around the interface it needed to lock onto. And then she felt it—the sudden jolt of power as masses and masses of data flowed into her. It was more than she had ever contained. It flashed across her mind. She saw snatches of imagery, star charts, chemical elements, formulae and physical realities; geographical terrain reports, surveys, build schematics and temple designs; postulations on god, on culture and history, on other civilisations, and on viruses, plagues and the White Death; and more. The barrage kept coming, battering Grace into submission.

And still the raw data came.

It was filling her.

She screamed, overwhelmed, overloaded, on the point of breaking. Still the facts and theories, the coordinates and geophysics reports, swelled to fill her memory banks as Mahalac data-dumped an entire civilisation's worth of knowledge into her.

She needed to dump data onto the mainframe, but she couldn't feel a connection with the ship.

Still the secrets of Mahalac's entire species poured into her, her memory bank overload approaching critical.

She saw it all.

And then he broke the contact, pulling the crown from her head. Her synthskin tore where the barbs had dug in too deep, exposing the oily subcutaneous membrane that protected her circuits. Her sensors detected the presence of oxidising agents in the air, and she realised that the process had badly burned the synthskin around her data port and left her hair shrivelled against her scalp.

"Run a search through the star charts for the exact chemical balance you need to sustain life. It's there, isn't it?" Mahalac said. For a moment she thought he had suddenly mastered her language, but it was the other way around. He wasn't speaking English, or any fragmented variant of it. He was speaking his own tongue, and she could understand every word he said.

Instead of questioning him, she did what he asked, and in a moment she had pinpointed the precise coordinates to a system which in every way mirrored the atmospheric and chemical balance of Unity. Of the hundreds of billions of stars in the galaxy, she had found the one with a planet ideally suited to support human life.

She needed to tell the Captain.

"This is what you were looking for, yes? A world capable of supporting your people, a planet to colonise?"

"Yes."

"Then it is my gift to you in return for your people saving my life."

PART 5

A SKY FULL OF STARS

FORTY SEVEN

CARSON DEVOLO STOOD on the bridge.

He had the coordinates right into the heart of the Goldilocks Zone and, if the alien's map of the stars was to be believed, to a world that they might call home. An end to their headlong flight. A place to plant roots, settle and grow. It was ironic that as a traitor Ro Varick hadn't damaged their chances of survival half as much as he had by being a hero. They had lost everything in the arboretum. All the flora and fauna of Unity was simply gone. Irreplaceable.

Devoló had thought about funeral rites for the dead. Rather than send them off into the coldness of space, he decided that they too would have a final resting place on this new world they would call home, so he gave orders to have the corpses put into cold storage. There was little dignity in it, but, he hoped, there was some form of closure.

Grace stood beside him. Beside her, the alien, Mahalac, was in Varick's chair. He was still suffering the effects of the White Death, a plague which thankfully didn't seem contagious to the humans of the Terella, but for now Deacon's vaccine was keeping it at bay. He was learning to communicate with words, and the exercise was much easier now that Grace was fluent in his mother tongue. He had pledged himself to the mission. He had nothing for which to stay here. Devolo had seen everything the alien had lost on a personal scale, as well as on a grander one. He had nothing left to live for here. The memories were inside him and he could take them anywhere in the galaxy. It was only a matter of time before the star imploded and took the entire ring with it. His only choice was whether he let it take him, too.

He chose to live.

Devol could respect that choice. It wasn't unlike the one he'd made when he had volunteered for the program to replace the astronauts lost on the arkships. He had known he could never go home again.

Until now.

"Set a course for our final destination, Grace. We're going home." It felt good to say it. *Home*.

"Yes, Captain."

"Miss Watt, all power to the sublight engines."

"Aye, sir," and a moment later, "all engines engaged."

The last of the few he now thought of as family moved up beside him. Amelia. She slipped a hand into Mahalac's, offering the alien the comfort of her touch. She was good like that: she understood what he needed. She could read him far better than Devolo could, but maybe that was because she'd taken him into her head willingly, sharing herself in ways he never had? That was a mystery they'd solve over time—they had plenty of it, after all.

"Take us out of here. Engage FTL at the edge of the star system, but not before. Understood?"

"It's not my first flight, Captain," Grace said. "I'm actually rather good at this."

"I know you are," he said, offering her a soft smile. "I'm just reminding myself. It's not every day you get to fly among the stars."

"Actually, it is," the A.I. contradicted.

He felt the familiar surge of power beneath him as the engines responded with a willing roar.

It would be a long time before they reached journey's end, if they ever did, but at least now they had a world waiting for them.

THE END

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