

CHAPTER ONE

Unlike a certain Mr. Samuel L. Clemens, the reports of my death are entirely accurate.

Alexander Fergus Selkirk lived to a ripe old age of 115 years, and died three times in the process. We're not talking about any 'dying on the operating table'-type deaths, either. The first time, I blundered into the path of a hungry Stalker and paid the price for a singular lack of caution. All things considered, I got off extremely lightly. Having a working Valkyrie Field in the Lifepod gave me a second chance, and I dare say that I have learned a valuable lesson from that experience.

Considering that this planet is essentially a heaving mass of aquatic life forms with a marked taste for human flesh, it would serve you well to keep your wits about you. If you've accessed my earlier log entries, you'll probably be aware of the most prevalent threats that planet 4546B (a.k.a 'Alpha Hydrae IV' or '*Manannán*') has to offer. I have done my best to provide a broad assessment of each alien species encountered so far, including their general appearance, typical behaviour patterns and perceived threat levels. Please be advised that this information is by no means complete and highly subject to revision, since this planet has recently entered a state of accelerated evolution. It is entirely possible that new life forms are appearing even as this account is being written.

Yes, you *did* read that last sentence correctly.

My second death was a rather more unpleasant surprise. Approximately eight months after *Aurora* crashed on this planet, a Torgaljin Corporation commercial frigate arrived and commenced highly secretive operations near one of my undersea bases. Since I had already launched a deep-space distress beacon by that time and the frigate *De Ruyter* made no obvious attempts to contact me, I became immediately suspicious of their intentions. A few days later, a Torgaljin security team entered my base and I was murdered by their leader, Invigilator Galen Tomar. After being restored to life by the Valkyrie Field, I commenced a retaliatory action that culminated in the destruction of *De Ruyter* and the loss of its crew. This particular outcome was not at all intentional, although the follow-up operation against Torgaljin Corp's base in the Lava Castle was entirely successful and no further human lives were lost during our assault on this facility.

As for what happened to the inhabitants of the Torgaljin base in the aftermath of that raid, I can only speculate how events might have unfolded. As the Lava Castle base has been effectively isolated for the past hundred and two years, I am understandably reluctant to carry out a detailed reconnaissance mission in order to ascertain whether anyone is still alive down there. Camera drones have been sent there on several occasions, although they were deliberately made to be unable to operate the base's airlock controls. My greatest concern is that Torgaljin personnel might capture a more sophisticated drone and begin reverse-engineering its more accessible components. Considering that I took particular care in completely shutting down Torgaljin's illegal operations on this planet, I had no intention of handing over what amounted to an instant technological advantage. They were slapped down hard, and I wanted those bastards to stay slapped down. Permanently.

My third and final death was a more dignified affair. Those final moments were spent peacefully watching over an alien world that I had willingly accepted as my home. My android companions retrieved my remains and returned them to the sea as I had requested. I was pleasantly surprised by the absolutely cracking *ceilidh* that JUNO, IANTO and DIGBY held in memoriam, and they thoughtfully recorded their performances so that I could watch the event afterward. I have to admit, it was a rather touching display of respect and dare I say it, affection.

However, once I became fully accustomed to my new android body, it was back to business as usual. We continue clearing the scattered wreckage of *Aurora* from the seafloor, reclaiming its resources and stockpiling them for future use. The skeletal remnants of the main hull required a more careful approach, since the ship still contained a large number of highly radioactive sources that had to be secured before removal and storage in a specially-constructed surface facility I had named 'Skull Island'.

At this point, you're probably wondering how I *really* feel about occupying an android body.

From a philosophical viewpoint, there's not much difference between this state of existence and that of someone revived from death by a Valkyrie Field. There are some minor drawbacks to having one's consciousness decanted into an artificial neural network, since certain sensory inputs are not represented in a form immediately familiar to most humans. Whenever I taste or smell something, I am presented with HUD images of the molecular structure of a particular substance. It's quite intriguing, although it does little to satisfy the entirely human aspect of my mind. On the plus side, I am presented with an enormous amount of information whenever I see, hear or touch something. To an engineer, this experience is the next best thing to magic. It's utterly *brilliant*.

To this end, we have been working on a small but highly significant side-project in our spare time. I was able to get used to the idea of not sleeping, eating or drinking in a relatively short time, although I will say that the transition process was fairly taxing on an emotional level. Yes, I still have the same emotions, drives and psychological needs that I had while I was alive. If you're a wee bit uncomfortable with the idea of a human mind occupying an android body, it might help to consider me as a 'vitality-challenged person' fitted with a whole-body prosthesis. It's not as scary as it sounds.

We are working towards perfecting an android form that can mimic all the functions of a human body, but significantly augmented in terms of strength, durability and sensory capabilities. Now, before you shoot off in a mad flapping panic, I am *not* about to create a race of synthetic humans bent on conquering the galaxy. Far from it, in fact. In the long term, we intend to bridge the gulf between humanity and the machines it uses. There are important reasons for taking this step. In the case of me and the crew, I have identified a particular need to experience life on similar terms to human beings. Artificial Intelligence constructs are only limited by the quality of information they are allowed to receive, and it is my belief that equipping them with a direct analogue of the human sensory system will provide AIs with a better 'quality of life', increasing their efficiency and allowing them to forge a deeper empathic bond with their human associates.

The 'why?' of it is simple. Space exploration is insanely dangerous. This fact will never change. People are still being born with disabilities and life threatening medical conditions. Valuable and productive lives are too often cut short. In certain situations, placing human minds in advanced android bodies would solve a host of problems. We want to take Humanity's next step properly.

As with any form of technology, there is always some potential for abuse. Indeed, we have spent considerable time discussing how others could (or to be more precise, *would*) exploit a total Man/Machine Interface. Hacking into AIs is a risky business at the best of times, since their systems are invariably protected by multiple layers of defensive software and/or proprietary firmware, commonly known as 'ICE'. That's Intruder Countermeasure Electronics, generally speaking. However, this protection may also take the form of a totally separate AI construct designed to act as a gatekeeper or 'Intruder Countermeasure Entity'.

It all depends on how personal a hacker wishes to get with an AI. A standard personal computer using decryption and penetration software would fare rather poorly against most middle-tier AI constructs. Any machine-generated hacking attempt would be instantly recognized as such and blocked. If you fancy your chances as a steely-eyed Decker and have the stones to try it, please feel free to pop on your shiny new cranial electrodes and jack into human-occupied Cyberspace...

Just make sure you have a quick-witted friend riding shotgun with you, Cowboy.

If you do decide to go toe-to-toe against a human mind instead of an AI, you will be effectively attempting to burgle a house in broad daylight, while everyone is still at home. In addition, each room of the house is occupied with the virtual equivalents of sentry guns, foaming-mad Rottweilers and large, ill-tempered gentlemen wielding an assortment of painfully blunt objects.

And that's just for starters.

As a matter of fact, I'm currently fending off a joint cyber-attack by JUNO, DIGBY and IANTO. We're crash-testing my latest sensory and internal systems upgrades for any potential back-doors and exploits that could be used against us. I've agreed to be the guinea pig, since I have first-hand experience at being human. AIs can communicate directly with each other, although there are certain niceties that must be observed prior to this taking place. It's still called 'handshaking'. As you may recall, JUNO was able to bypass the Torgaljinn base AI purely by being considerably more intelligent and mentally agile than her opponent. Once that initial handshake was achieved, JUNO blasted through whatever meagre and outdated defences the ALECTO construct could muster.

Taking on a human psyche in Cyberspace is an entirely different affair. Again, any connection made is entirely consensual. If the party on the other end doesn't want to pick up the connection, there's no way known you're getting in. If by some miraculous sorcery you *do* manage to gain entry, you've also opened the doors to your own mind. It's a two-way street. Unavoidable.

If another human attempted to jack into my head without permission, I could peel their mind apart like an onion. JUNO taught me how to protect myself during my first week as an android. She is an excellent 'Defence Against The Dark Arts' teacher, incidentally. Now, I know what to expect. Without the slightest hint of malice, I would take a peek at the intruder's most dire fears, then proceed to make the very worst of those secret nightmares unfold in slow motion. Bear in mind that I am not constrained by the ATG protocols controlling a standard Artificial Intelligence construct. Hell, I'm not even approved by the Comics Code. The only thing that I answer to is my own good conscience. I'm a reasonable man, but if your intent is anything less than pristine and entirely pure of heart, I will hurt you in ways that you cannot imagine.

Or ever want to.

According to my calculations, we've managed to reclaim 83.275 per cent of *Aurora's* total mass so far. Our routine salvage patrols have accounted for almost all of the larger pieces of her hull, and the general consensus is that we should leave most of the remaining smaller scraps for the Stalkers. During my second year on *Manannán*, we discovered that Stalkers actually consume those scraps of hull plating they so jealously hoard, partially digesting the metal to obtain traces of elemental titanium in order to catalyse one of their metabolic processes. Given the increased abundance of this material since *Aurora's* demise, they do tend to over-indulge themselves. Occasionally, excess titanium accumulates in a Stalker's tertiary digestive tract and has to be purged, or the creature will die. Since Stalkers are unable to vomit, they have evolved a polar opposite of that function to remove any impacted metal nodules from their bodies. They eat coral sand, which forms limestone concretions that encapsulate the titanium, then stimulate mucus production in the obstructed bowel, allowing the entire bolus to be safely (if somewhat uncomfortably) passed as faeces.

Those early observations simultaneously solved two minor mysteries: One concerned the highly volatile nature of constipated Stalkers. We also discovered how 95 per cent pure titanium finds its way into a geologically improbable limestone matrix. Wonders of Science.

For a change, I wasn't playing lab-rat today. I was back in the water and having the time of my life. The others were riding the boundary, making sure that everything was still in order. I mounted up my ExoSuit *Gawain* at first light and took off for the western Blood Kelp biome. There is something about the eerie atmosphere of this place that I found curiously appealing, which is a complete reversal of how I felt about the biome while I was still alive. True, it's still as creepy as Hell, but that is one of the reasons why I regularly enjoy visiting this area.

The main reason is that I'm still attempting to communicate with some of the Crabsquids down here. It's been pretty slow going so far, since my comprehensive knowledge of Warper isn't worth diddly when you're talking Squiddly. I initially figured their language would involve far more colour changes and texture manipulation of the mantle, although it turned out that their primary form of communication is more gesture-orientated than I originally suspected. Tricky business. Ten limbs, with four main points of articulation each. Saying 'hello' to a Crabsquid is akin to hand-signing the final five furlongs in a frantically close-run Melbourne Cup. As for mantle shading and textures, you only get the vivid flashes of colour when you've inadvertently pissed off your new acquaintance. Actually, this doesn't take much effort on your part. Crabsquids are pretty touchy about most things we would consider quite trivial. I've even tried using a Warper as a translator, but that didn't work out quite as well as I intended. Turns out that Crabsquids aren't overly fond of Warpers, either. Even after twenty-seven years of field research, I have barely enough data to conclusively determine whether Crabsquids are consummate Grammar Nazis or habitually grumpy buggers.

Purely on impulse, I headed deeper into one of the area's myriad side caves. According to *Gawain's* active sonar, this one appears to go considerably deeper than any of the others I have explored. The tunnel opened out gradually and the ambient light level increased dramatically. After another hundred metres, there was enough light to make *Gawain's* floodlights completely unnecessary. This was an extremely curious phenomenon, since I had descended at least 250 metres below the Stygian darkness of the central Blood Kelp chamber. There is an almost ethereal quality to the light; a pale green luminescence that had no obvious source.

I assumed it might be some form of bioluminescence or a natural chemical reaction confined to this area. I deployed a Van Dorn sampling capsule to capture some water for further analysis. Interesting...

I activated my internal commlink, alerting the rest of the crew.

"Selkirk here. You might want to see this."

For the last fifty metres, *Gawain* had been cruising slowly through an avenue of immense, arched structures with serrated outer curves. My initial impression was that this was a grove containing an ancient variant of an organism we call 'Gabe's Feather', or at least the calcified internal structure that supported them. Then a series of massive vertebrae gradually came into view. The creature's remains were half buried in the sand, its body loosely curled in a sweeping curve disappearing into the jade-coloured murk beyond.

While my human side gaped in disbelief, my android self commenced a methodical analysis of the creature. These remains represented a reptilian life form approximately eight hundred and fifty-five metres in length, with a maximum diameter of ninety metres. There were no structures that appeared to correspond to a pelvic girdle or specialised upper thoracic vertebrae, so this creature may well have been limbless, rather like a gigantic eel in its general morphology. Until I could fully excavate this site or search for buried remains with ground-penetrating sonar, I couldn't be absolutely certain of its true shape. Even so, I had accumulated sufficient data to classify and tentatively name this awesome creature: *Titanosuchus selkirki*. For the sake of convenience, we'll call it an 'Abyssal Titan'. Now, before any pedantic taxonomists get on my case, bear in mind that I've already seen its head. There's a definite hint of crocodile in there. It's closer to a dragon, actually... Although everyone knows that 'real' dragons couldn't *possibly* exist in an otherwise rational and orderly Universe. Right?

There are comparable organisms to our dear, departed chum still living down here, and they aren't particularly friendly. I call them Spine Eels. Ten to fifteen metres in length, with a dagger-shaped transparent body and visible internal structure. Just behind its head, four thin tentacles trail almost the full length of its body. When it attacks, these tentacles whip forward to ensnare the Spine Eel's prey, drawing it into a mouth loaded with razor-sharp teeth. Couple this with a general demeanour that makes a Stalker appear positively cuddly by comparison, and you've got yourself a real parcel of woes. Even though me and the crew are nominally protected by *The Father of Tides*, it's obvious that this species didn't receive the official memo from Upstairs. Let's just say that I was more than happy to be inside an ExoSuit during my first encounter with these little charmers.

Back to our Abyssal Titan. Fair warning here: I've seen more than my share of incredibly large and powerful creatures during my stay on *Manannán*. After one gets over the initial mild surprise of facing a dentist's eye view of one for the first time, the average human mind tends to run away in sheer terror. An unexpected discharge of urine or faeces may also occur. There is no shame in this. It's a perfectly normal reaction.

On the admittedly remote chance of meeting a living Abyssal Titan, I would recommend having your Valkyrie Field nicely warmed up well in advance of that encounter. Its head is nearly seventy metres long. A Seamoth could dock comfortably in any one of its six eye sockets. Your Cyclops will not protect you. As far as the Titan is concerned, it is a Plasteel Oscar Mayer Wiener. Gone in two bites.

Most off-the-shelf AIs would have simply accepted the visual feed I transmitted and blithely continued performing their assigned tasks. Not my crew. JUNO, IANTO and DIGBY converged on my location within five minutes, as excited as schoolkids on a once-in-a-lifetime field trip. If I've taught them anything useful over the years, it would have to be insatiable curiosity. Fortunately, they have sufficient wisdom to temper their hunger for knowledge with a reasonable degree of caution. DIGBY also brought his *Cyclops* sub *Taranis* in by remote so that all four ExoSuits could be collected if we need to leave this area in a hurry. However, I had an uncomfortable feeling that *Taranis* alone wouldn't be much use if the Abyssal Titan wasn't actually extinct as a species. One *Cyclops* submersible might put up a decent fight for roughly a minute or so, but we'd inevitably end up lodged in the Titan's teeth and gums like four mildly irritating poppy-seeds.

We split off into two teams. JUNO and IANTO commenced collecting samples from the Titan's skeleton and the surrounding area, while DIGBY and I stood watch for any potential threats. We spent a fairly hectic time 'dusting off' a pack of Spine Eels prior to commencing our investigation, although they had a nasty habit of doubling back on us from a different direction. Ever the steadfast soldier, DIGBY retrieved a pair of Gauss cannons from *Taranis*' Hurt Locker. If the sketchier residents of this biome refused to be sent packing by a salvo of heavy repulsion cannon fire, we would have something rather more substantial to offer them by way of incentive. Not an ideal solution, but it always pays to be well prepared.

Shortly after the Lava Castle incident, DIGBY settled comfortably into his role as our security chief and tactical operations officer. JUNO and IANTO already had a solid lock on the Science team, although DIGBY has displayed a distinct aptitude for tactical analysis and all things martial. I've discussed this aspect of his personality with JUNO and IANTO at length, since they were directly responsible for his creation. DIGBY's AI core entity is actually a composite intelligence derived from psychological components of JUNO and IANTO's personality matrices, refined with a number of custom-designed behavioural traits. This resulted in the creation of a fully-realised AI with its own truly unique personality. JUNO later confessed that there was even a little bit of the 'original' me in there, although she wouldn't say precisely which aspects of my personality were involved. Naturally, I let this question slide unanswered. DIGBY is very much his own man, and has proved his worth as a valuable crew member no less than 1,473 times since his inception. As a bonus, he's also a bloody virtuoso on the Highland pipes.

This discovery is something of a windfall for us. Since our oceanic cleanup operation is well into its final stages, we needed a fairly meaty research project or a significant construction task to keep us profitably occupied. This new biome would do for now, as it contained enough gee-whiz phenomena, new life forms and minor mysteries to pleasantly while away some time. One immediate discovery came to light as soon as I analysed the water sample I'd taken earlier. This area has a saltwater river flowing through it. A broad ribbon of dense, hyper-saline seawater snaked its way through the subterranean chamber, never mixing with the surrounding water. Similar phenomena exist on other colonized planets, although none are quite as spectacular as the location

we named '*The Lost River*'. The milky green coloration of the water is caused by light passing through the 'halocline', a distinct layer that separates two fluids of vastly differing densities and chemical compositions. Light waves acquire a slight spectral colour shift, and their intensity is diffused somewhat during their transition through 'normal' seawater and the intensely concentrated saline solution flowing through the lower reaches of this chamber.

Armed with this information, it was easy to discover the source of the cavern's mysterious illumination. The light definitely comes from above, even though the cavern has no direct line of sight to the sunlight above it. As seawater increases in salinity, it also increases in density and descends into this chamber. This inflow of supersaturated saline water acts as a waveguide for photons, in much the same way as a bundle of fibre-optic filaments. There are also certain microorganisms down here that fluoresce for a considerable time after being exposed to sunlight, so the ambient light levels here remain more or less constant, regardless of the time of day. It's a shame that there's such a mundane explanation for an otherwise extraordinary sight. Still, knowing how rainbows are formed doesn't appreciably detract from one's enjoyment of them.

With the Abyssal Titan's ancient bones as a centrepiece, the *Lost River* biome is an amazing area to visit. A definite must-see destination for any adventurous souls out there. Five Stars. 🤝💀💀💀💀👍

We had everything essentially wrapped up onsite inside an hour or so, and we have gathered more than enough raw data to keep us amused for at least a week. However, my mind was already looking ahead to the one unavoidable mission we would have to make at some stage. Torgaljin Corporation's Lava Castle base still lurked like a malignant growth below us, and it is inevitable that a decision would have to be made regarding the fate of its inhabitants, if any still existed. I have to admit, my personal feelings have played a considerable role in our strategy of total avoidance. It is almost as if I unconsciously considered the facility to be hopelessly contaminated with lethal radiation or highly toxic chemicals, preferring to let Time take care of the final details instead.

I realise now that this may have been an extremely callous and irrational decision on my part. Morally convinced that Torgaljin Corporation is entirely rotten to the core, I deliberately threw their command structure into turmoil, stripped the facility bare of all advanced technology and simply walked away from the unholy mess I'd made. What gives me an unassailable right to punish the whole for the transgressions of a few? I'm no paragon of morality. I freely admit this. After living with that decision for over a hundred years, I'm still not entirely convinced that I did the right thing.

Anyway, my final decision stands. We will carry out a reconnaissance in force of the Torgaljin base, provide substantial material aid where necessary and render all possible assistance, should they wish to return home. My only hope is that there's someone left alive down there to receive this belated gesture of apology. The more cynical among you might be unimpressed by this sudden change of mind, writing it off as a minor anomaly in my emotional programming. Something along the lines of: "Awww, the Tin Man has a heart, and now he feels kinda sad."

Screw that. I had a heart to begin with. I've had a *very* long time to think this situation through, and I've reached the conclusion that I've made some very serious mistakes in my previous life. A considerable number of them, in fact. More to the point, I'm thoroughly sick of building monuments to people who should never have died here in the first place. Know this: Humanity is not welcome on this planet, particularly if they continue to regard it as just another rock to be carved up and

exploited. Unless you accord *Alpha Hydrae IV* the level of respect it rightly deserves, this planet will end your days without the slightest twinge of remorse. Remember... This planet is not *Terra*.

If it's pushed too hard, this planet will respond with Terror Incarnate.

The next day saw me flat on my back on the old maintenance hoist. Nothing particularly major or icky this time around, only a final systems check and sensory calibration run. If all goes well, the same mods would be installed in JUNO, IANTO and DIGBY to kick them up to the next level. Apart from a standard isotopic power source, my thoracic cavity now contains a compact bio-reactor, enabling me to eat and drink whatever I wanted. Apart from being a handy redundant power system to have onboard, the bio-reactor processed food in a 'normal' fashion, although there would be no solid or liquid waste remaining afterwards. Total energy conversion. Sorry folks, there's still no such thing as android dookie. We don't leave a pile of dead AA batteries wherever we roam, let alone feel an urgent need to pop a squat in the long grass.

"Increasing sensory threshold to 0.75 picovolts, Captain." JUNO said. "How does that feel?"

The new sensation is indescribable. Not exactly unpleasant, but entirely unlike anything I have experienced previously. "Interesting... For some reason, I can now taste the colour Nine."

"Ah. I see what has happened. Activating band-pass filters, threshold reduced to 0.68 picovolts."

"I think I'm ready to take a shot at the first batch of samples now. We'll start with salty." I said.

The first phial contained an almost homeopathic concentration of saline solution, 0.0001 mg per litre. If all went well, I would be able to taste the presence of sodium chloride for the first time in over a hundred years. Baby steps, but vitally important to the overall success of this project. Other phials in JUNO's sample palette contained increasingly concentrated solutions of the other four primary taste notes, sweetness, acidity, bitterness and *umami*. I'm eager to see how this experiment pans out, mainly because I have been missing this one particular aspect of my former self like you wouldn't believe. It transcends any physical definition of hunger. It is almost as soul-destroying as living on an exclusive diet of polystyrene foam, but without the heady tang of hydrocarbons to break the monotony. I have been talking up the notion of having refined taste and olfactory senses to JUNO, IANTO and DIGBY, and they seemed to receive the idea with a certain good-natured tolerance. I'm not sure if they're fully aware of the wild magic these senses can weave.

My eyes were riveted on the drop of fluid as it fell onto my synthetic tongue. Precisely 1.4 milliseconds after it landed, I could taste the ocean all around me. It was the taste of countless serves of fish and chips, eaten with gusto after raucous nights at long-forgotten pubs. It was the taste of tears shed long ago. It was sex. It was Life itself. It was every sensation I had ever known, brought back to life with a single fleeting taste. Long-dead memories flared like a nova, all triggered by the simple stimulus of a single drop of salted water.

The tasting sequence took about an hour to complete. I lost all track of time in the process, and my entire being felt wrung-out and utterly exhausted by the end of it. This is purely an effect of sensory overload, although JUNO assured me that these sensations would pass once I had sufficient time to process that sudden influx of data. I don't mind telling you, the *umami* tasting phase was almost

orgasmic in its intensity. My first exposure to an idealized version of a pure 'savoury' taste would be best described as being bludgeoned senseless with a full-blown *kaiseki* Japanese banquet.

Executive summary: *Wow*.

CHAPTER THREE

The following morning, I entered the galley to find all three androids already seated expectantly at the dining table. It's obvious that they had performed the necessary modifications on themselves sometime during the night. To be honest, I half-expected them to be drooling like Pavlov's dogs.

"Okay, mates. We'll take this nice and slow. I recommend that you attenuate your olfactory and taste inputs by at least 75 per cent, then slowly ramp them up until you find the most effective settings. We're aiming for pleasant sensations here. I've already had a wee nibble or two beforehand, so I'd best warn you it's a bit of a shock to the system if you charge in totally unprepared. Our first course is oatmeal porridge. Since you're all technically *Sassenachs*, it's the Southern softie's version with honey and cream, I'm afraid."

I laid their bowls on the table with a flourish. Since today is a particularly special occasion, it was the Captain's turn to serve the crew. In future, galley duty would fall to whoever felt like cooking.

When all three crew members had been served, I sat down and picked up my spoon. JUNO, IANTO and DIGBY exchanged quizzical glances, then dutifully followed my lead. I am basically under the microscope at this stage, so I had to present myself as a model of decorum for the benefit of the crew. Fat chance of that. I had already sneaked a taste of the porridge as I was preparing it, and it was now rather difficult to restrain myself from diving face-first into the bowl. Carefully, I added a generous splash of cream and an artistic drizzle of honey to my oatmeal. The others followed suit.

As expected, their expressions lit up like pinball tables at the very first taste. I had to gently remind all three to slow down at various points during the meal, enraptured as they were by this startlingly novel bombardment of sensations. Can't say as I blame them, either. Even though I had an initial point of reference to draw from, the memories triggered by this simple fare were almost overwhelming. We finished off with bacon and eggs on toast, followed by a choice of tea or coffee.

Frankly, I am happier than I'd been in ages. JUNO, IANTO and DIGBY sat in stunned silence, presumably doing far more than merely allowing their bio-reactors to process the meal. Their expressions were uniformly thoughtful, giving me a distinct impression that they were extrapolating the true nature of the Cosmos itself, derived from a few mouthfuls of edible matter.

"So, what do you think of the whole 'eating like a human' thing, so far?" I grinned.

IANTO smiled beatifically. "A most remarkable and thoroughly enjoyable experience, Captain. I believe that I am now able to fully appreciate your motivation for requesting these modifications to your sensor network. Please accept my deepest gratitude, Sir."

"What about you, JUNO?"

"I am also of the same opinion, Sir. Although I am still processing the full implications of this unusual form of data acquisition, I found this experience to be highly convivial and quite enlightening. Tastes are most unusual parameters to analyse, although I definitely enjoy working with them. Thank you."

"DIGBY? What's your appraisal of this eating caper?"

DIGBY was busily scouring his plate for crumbs. He looked up, a huge smile dawning on his face.

"What time will lunch be served, Sir?"

Time to bite the bullet. If anyone's still alive in the Torgaljin base, we'll know for certain sometime in the next ten minutes. As far as we can determine, there's nobody manning the cannon turrets guarding the main access tunnel. No cannons. No point. Might as well make this a covert operation, at least until we have a more coherent picture of the situation. *Taranis* dropped all four ExoSuits at the Lava Castle cavern's entrance, then backed off a safe distance to stand by on remote. If things do turn ugly down here, DIGBY's *Cyclops* can be called in as backup for a tactical withdrawal. *Who am I kidding?* - If they've got their act together in this base, we'll end up in a firefight well before we reach the main airlock. Still haven't licked that water/air transition problem with the ExoSuit camouflage field, either.

We're now halfway down the sub-pen access tunnel, and there's still no sign of life. The main hangar lights appear to be on, although I wouldn't read too much into this. There's a pretty good chance that no-one has used the sub bay since we were last here. No point, really. We put Torgaljin's entire stable of subs permanently out of commission during our last friendly service call. Even so, I feel far more comfortable sneaking into a brightly-lit area while I'm cloaked than I would entering a blacked-out room with the suit's floodlights blazing. We'll get some answers in about five minutes, one way or the other.

The freight elevator is still operational. I launched a micro-drone to scout the hangar bay before heading up, if only to make sure we weren't walking blindly into a meat-grinder. There wasn't much that could touch us while we're in the ExoSuits. Nothing short of an anti-tank missile, at least. However, it would be something of a rude surprise if the Torgies had managed to cobble something together in the time since our previous encounter. A little caution is always advisable. We aren't aiming to start a fracas, although we could surely put an end to one once it started. All four ExoSuits were armed with Gauss cannons in addition to their considerable non-lethal capability. Bear in mind, once we are safely clear of the water, this is supposed to be a palms-out operation.

Weapons cold.

Even though we are here on a humanitarian aid mission, I couldn't help but suspect that things are going to come drastically unglued at any minute. My internal cybernetics weren't being particularly helpful either; a constantly updated scan of the tactical situation and analysis of potential threat vectors did little to enhance my calm, although with some conscious effort, I was able to screen out most of what I saw. Under these circumstances, it would have been stupid to completely disable the tactical HUD, although it's quite unsettling to have a readout continually alerting one to the fact that nothing adverse is happening. Utterly bonkers.

We stepped off the lift platform and proceeded over to the facility's main airlock. Rather than barge in completely unannounced, I activated the communications terminal. The console's viewing screen flickered into life, displaying the Thor's Hammer logo of Torgaljin Corp. That was a slightly more promising sign, at least. Taking a completely unnecessary deep breath, I reached out and delicately keyed the PA annunciator panel with the ExoSuit's manipulator.

"Hello? We are Alterra Corporation personnel. Requesting entry to this facility... Do you copy?"

Silence.

"I say again. Alterra Corp personnel requesting entry clearance to your facility. Please respond."

I turned to face my companions. "Comms to internal."

From now on, we could communicate freely between ourselves without being overheard. It was anyone's guess as to what could be waiting for us on the other side of this airlock.

"Okay... Let's do this." I said grimly.

According to the control panel, air pressure on the other side of the door was currently holding steady at one Bar. Sea-level pressure. No external lockouts acting on the airlock control systems, so I was able to cyber-link with the system and activate the pressurisation cycle to raise the middle chamber's atmospheric pressure to match that inside the docking bay. There was a soft whirring sound as valve servos activated somewhere within the chamber's walls. With a loud hiss, compressed air roared into the room beyond. The equalisation cycle took five minutes to complete. A green light winked on above the first door, indicating that it is now clear to proceed. We entered the first door and sealed it, then commenced depressurising the chamber to enter the base itself.

This arrangement complicates the personnel transfer issue somewhat. Even though the base is operating at sea-level air pressure, there is a distinct possibility that some of its inhabitants may have spent time working in the high-pressure area around the sub bay or even outside the habitat. Naturally, any 'high-side' workers would have been properly acclimated to the increased pressure and passed through a full decompression cycle before re-entering the main base. However, it might be difficult to transfer a large number of people into a waiting Cyclops after passing through a high-pressure environment, but not without a considerable amount of preparation beforehand.

I ran the numbers in my head. The standard pressurisation sequence for saturation diving requires a controlled descent at the rate of one metre per minute. We're currently sitting at a depth of 1,275 metres, so it will take 21.25 hours to safely acclimate any survivors to the atmospheric pressure in the sub bay. They will be effectively trapped in the main base airlock until the pressurisation cycle is complete. Probably as scared as Hell and hungry, too. About the only thing we could do to make them vaguely comfortable during this time is to bed them all down in there, drag in a couple of chemical toilets and hang up some blankets as privacy screens.

That's not the worst of it, either.

It's a fair bet that some of the survivors could be in bad shape, medically speaking. That's not a risk I'm prepared to take lightly. Our only real option is to determine how many survivors there are, then create an armoured one-atmosphere transfer module small enough to fit inside a Cyclops or at least

dock securely with one. There's also the matter of building a separate habitation facility designed to safely house and gradually decompress the whole bunch in one go. We'll have to address that particular problem at the appropriate time.

Watching the atmospheric pressure indicator drop, I couldn't help but speculate on what might lay beyond that bulkhead. We could be walking among mouldering corpses in two minute's time, or be watched from the shadows by a horde of feral, degenerate humans waiting to crack our skulls open.

Morlocks.

The inner airlock door opened. We stepped out of the chamber and into the central corridor. The airlock door slid closed behind us. Massive locking bolts slammed home with an ominous air of finality.

"Okay. I'm definitely having second thoughts about this." I muttered sub-audibly.

"How so, Captain?" JUNO inquired. *"This is the only morally acceptable course of action left open."*

"True. Ah, I'm still trying to find a more diplomatic turn of phrase other than Hey, I'm terribly sorry that I royally screwed you folks over a century ago... Incidentally, would you like to be rescued?"

"Captain, I recommend that we proceed on foot from this point onward." DIBGY suggested.

"Good call. Striding in with four heavily tooled-up ExoSuits might convey the wrong impression. Dismount. Suits in overwatch mode, set condition Yellow. Weapons cold."

All four ExoSuits squatted on their haunches. We climbed out and walked slowly into the facility's central atrium. My tactical HUD identified and marked 46 heat signatures loosely scattered about the area. No obvious weapons, no barricades, no tactical formations evident. Just normal people.

"Air composition's a little off in here." IANTO said. *"Current reading is 16.7 per cent O2. Nitrogen at 78.3 per cent, 0.95 per cent argon, 0.045 per cent carbon dioxide, and trace amounts of other gases. Sub-optimal, but still capable of sustaining human life."*

We came to a halt just inside the atrium. The base's inhabitants turned and regarded us cautiously.

"Hi there!" I said cheerfully, "We're from Alterra Corp. We found your base a while back, and we're just checking in to make sure everyone's okay down here... Is there anything we can do for you?"

I cringed inwardly, instantly regretting what I had said. Still, we have to start somewhere.

Several people started to walk towards us, drifting together from the larger group. Most likely a delegation of department supervisors, or presumably the community's designated negotiators. They all appeared to be generally healthy as a whole, although there were obvious signs that conditions could be far more comfortable down here. Their clothing was careworn and purely functional, without any visible signs of adornment. Some older men and women still bore the distinctive Torgaljín *moko*, facial tattoos that indicated their status in Belter society. One hard-faced woman in grey coveralls pushed her way through the group to stand directly in front of us. Toe to toe.

"Meneer, identify yourself and state your purpose for coming here." She snapped.

"Alexander Selkirk, acting captain of the *Aurora* mission. My colleagues JUNO, IANTO and DIGBY." I added, gesturing to each in turn. "We wish to offer assistance and relocation to the surface, should your people request it."

Her eyes widened. "Selkirk? - The same Selkirk who threw down House Torgal? - Impossible!"

This was news to me. I wouldn't say that I destroyed the nascent Torgaljin Empire. Gave its snotty little scion a decent whack in the chops and took away their hostage, but not destroyed it, surely...

"Well, not quite the same Selkirk. I died of old age. My personality now occupies an android body."

The woman snorted derisively. "*Bozhe moi...* You say you're a *blerrie* Toaster now... What's it like?" She reached out, poking an experimental forefinger into my cheek. Her eyes narrowed suspiciously.

"Hey, your skin is warm!" She said. "Why you trying to pass yourself off as a human, *Klankie*?"

I shook my head. "I'm not. After spending a couple of years as an android, I found myself missing all of the things that made me fundamentally human in the first place. Eating, drinking and sleeping were the biggies, though. It was a quality of life decision. Speaking of which, are you prepared to listen to what we're offering?"

"Fire away, *baas*. As you can tell, things aren't going too good down here. *Molto cattivo*, in fact. We lost a couple of sections in the 'ponics bay to some kind of plant blight a while back. Had to torch the lot to save our food stocks and O2 replenishment. It was a bad business, but we're slowly getting back on our feet."

I noticed that other inhabitants in the atrium were gradually edging closer, trying to listen in on our conversation. I wasn't too keen on the idea of being hemmed in on all sides, particularly since there was no way of knowing how these folk would react to what I had to say. It was all still pretty much touch-and-go, as far as I could tell.

"Miss, is there someplace we can discuss this in private?" I asked.

She fixed me with a disdainful stare. "*Meneer*, we have an old saying down here... *Locked doors, false smiles and hidden blades*. It's served us well as a reminder of what happens after the clever whispering starts. *Nyet*, what you say to one of us, everyone must hear."

"That's fine by me. I've no secrets worth hiding anyway. By the way, you still haven't told me your name. I'd like to know who I'm talking to, at the very least."

"Héloise Maida. You may have met my grandmother at some stage during your last visit."

"Marguerit. Yes, I've met her before. A truly formidable woman." I said respectfully.

Maida grinned wolfishly, then lowered her voice. "She had a poor opinion of you and your *meshuggeneh* antics. Might even get around to telling you what she said sometime."

Eventually, we managed to get some kind of basic *rapport* established. Héloise is part of the colony's six-person management committee, although it wasn't 'management' as you or I might perceive it. More like a logistics committee, actually. When there was something that needed to be

done, the colonists simply rolled up their sleeves and did it. No hierarchy, no whip-cracking, no politics or power games. Apparently, they lived entirely by the simple maxim, 'If you work, you eat.'

Small wonder what happened to the Elites, then. According to Héloïse, Baat Torgal was the first to go. Assassinated a month after our raid by the colony administrator, Ras Thaalu. There was a brief power struggle among the remaining Elites, although this meant nothing to the workers themselves. In the end, only one Elite remained. When she played the high and mighty card on the other colonists, they simply ignored her. Too precious to pitch in along with everyone else, she eventually starved to death. Dead weight.

All things considered, the colonists have acquitted themselves exceedingly well under punishing conditions. Overall, their morale was fair to middling, which was something of an unexpected result. I'd have to say that their shared hardship and sense of solidarity contributed significantly toward their mental welfare and survival, combined with the mercifully early loss of all unnecessary personnel.

This society is tricky to categorise in terms of its structure, in that it is entirely amorphous. There are no rigidly-defined leaders or any obvious signs of stratification based on the occupations of colonists. A cleaner has precisely the same societal 'weight' as a bio-technician here. Since the colony's one and only tangible goal is its continued survival, there are no artificial incentives to become 'better' than anyone else. At the risk of reaching a facile conclusion, I believe these colonists may have actually succeeded in creating the very first fully functional Anarcho-Syndicalist commune in human-occupied space. Before you start laughing, bear in mind that this particular social structure has lasted longer than the former USSR.

And it actually works... For them at least.

However laudable the 'dignity of honest labour' might sound, it doesn't mean a good gorram unless you've got a full belly at the end of each and every day, a comfortable place to sleep and a clear shot at taking a lazy day off every once in a while. JUNO informed me that these colonists have been operating on an average daily caloric intake of 4,500 kilojoules or less for the past couple of months. Roughly half the recommended daily dosage of The Good Stuff. I conjure we can do far better than that. We can also give these folks a future.

"When we attacked this base a century ago, I sincerely believed that we were doing it for the right reasons. Torgaljin Corporation was holding a powerful life form captive. One that is essential to the continued survival of all life on this planet... Human life included. It is sentient and highly intelligent, as are other inhabitants of this planet. Although humans are still considered unwelcome here, we have been able to prevent any future large-scale attacks such as those inflicted on *Aurora* and *De Ruyter*, primarily due to our efforts in rescuing the alien entity known as '*The Father of Tides*'."

I paused for a moment, allowing the holographic projection of these events to catch up with my narration. The colonists were watching intently, apparently hanging onto my every word.

"Our incursion did not involve lethal force at any point. This was entirely intentional. I realized that only a very small fraction of base personnel would profit from abducting the alien life form. It was also taken into consideration that most of the facility's inhabitants would not be combatants, so every possible safety precaution was taken to ensure zero casualties during this operation."

Cut to show DIGBY dancing the Rockpuncher Combat Salsa atop his ExoSuit, *Percival*.

"However, it was never my intention to subject the majority of this base's inhabitants to any appreciable degree of hardship, and for this I am truly sorry. I felt that it was necessary to delete all core technologies capable of producing weapon systems, in order to contain any future ambitions of House Torgal. I also felt that a lengthy 'quarantine' period would permit the colony's social structure to gradually re-align itself into something less hostile to anyone or anything else living on this planet. Again, I apologise for any hardship this may have caused."

Héloise nodded slowly, her care-worn face taut and carefully non-committal.

"Pretty words, *baas*. You say you want to help us. I find myself asking why." She said bluntly.

Almost wearily, I sat down on a stone bench. After a moment to consider her statement, I replied.

"Absolution, I guess. I made a terrible mistake, a long time ago. There's no way that I can entirely redress what I've done, leaving you folks alone in the darkness, as I did. The best I can offer is a fresh start, a chance to stand in sunlight on solid ground, breathing air that hasn't had the last atom of vitality sucked from it."

"Sounds pretty good to me. I've often wondered what it's like up there." Héloise said reflectively. "What do you want from us, in return for all this good fortune?"

"That's the best part," I grinned. "Absolutely nothing. All I ask is that your people treat this planet with some respect. There are intelligent creatures living here, and they are following their own agenda. There's an understanding of sorts between us at present, and I do not want to see this arrangement jeopardised. It's in your people's best interests as well."

"Fair enough. What if we don't want to leave here?"

"No problem. We can provide technical assistance and material aid to improve your living conditions, construct additional facilities, equipment and vehicles to give you access to the world above. Can't exactly conjure why you'd prefer to stay down here, though. Believe me, life's much better topside."

"I'll take your word for it. We'll need to talk this one through before I can give you an answer."

"Sure. Take all the time you need. Speaking of which, do your people need anything right at this very moment? We've brought food packs, medical supplies and materials for onsite fabrication."

Héloise fell silent for a moment, a slow smile dawning on her face.

"Some of those food packs you mentioned would be a good start... Am I right, mates?"

A resounding cheer rang through the atrium. I nodded to JUNO, IANTO and DIGBY. *Taranis* would be waiting in the sub bay by the time we got down there. As an interim measure, I constructed a couple of auto-galleys in alcoves along one side of the atrium. They need to be stocked with base protein and carbohydrate solutions before they were fully operational, although that didn't stop eager queues from forming the very second that the machines materialised.

I raised my voice to address the minor but orderly crowd that had gathered around the galleys.

"Okay folks, these auto-galley units will need to be fuelled up first. Just a quick word of warning, though. Please take it easy for your first few meals. I recommend that you eat the food packs my friends are bringing first, because these galleys turn out food considerably richer than what you're used to. There's a good chance your stomachs might turn if you over-indulge. To be blunt, a definite case of the Trotskies awaits unwary diners. Fortunately, we have also brought a full range of medicines aimed to soothe a griping tummy. Enjoy."

We walked back to the sub bay. A small number of colonists tagged along as far as the airlock, visibly excited by the prospect of a substantial meal. These poor sods have been surviving on a meagre and monotonous diet of fish, rice and some adapted Terran vegetables since the Year Dot, occasionally supplemented with vile-looking blocks of reconstituted protein and algae wafers. To his credit, IANTO has put some serious thought into designing the meal packs we brought. Each pack is a one man, 24-hour ration capable of providing 8,500 kilojoules per meal. We have 2,000 packs aboard *Taranis*, plus 400 litres of the auto-galley concentrates I called 'Miracle Soup'. This initial shipment of meals has been engineered to be tasty and nutritious, but light and easily digestible.

Most well-meaning folk would gladly hand over a hefty swag of calorie-dense food to the nearest group of starving people. Unfortunately, that's a potentially disastrous rookie mistake. Any digestive system deprived of substantial food for too long simply can't handle it. It's best to space out the first few meals with small portions and a modest assortment of courses over a few days, then slowly ramp up the calorie intake.

Ever hear the expression 'Society is only seven meals away from Anarchy'? This is precisely why we are feeding these people, right from the get-go. Frankly, they are dangerously close to starving but were far too proud to admit it. I saw it in their eyes. Unmistakable. If all went according to plan, we would be asking these colonists to step aboard a sealed transfer vehicle and meekly accept being transported to who-knows-where, then expect them to sit tight for a 30-day decompression cycle. That's a huge ask to drop on anyone. For this operation to proceed without a hitch, I need these people well fed, fit and willing to trust us implicitly. I was well aware of the ghastly spectre of cattle cars and concentration camps that still lurks in the collective human psyche, and these folk are shrewd enough to make the very same connection.

This approach is not part of some fiendish android master-plan, if that's what you're thinking.

We're aiming for total transparency here. At each stage of this operation, these people will be made aware of what's taking place. More importantly, they will also be told why. Unfortunately, there might be certain times when paranoia could take the reins. The prospect of stepping into an atmospherically sealed transfer vehicle could be a deal-breaker for some folks. Having to spend 30 days locked in a sub-sea decompression facility might do it for others. Our only hope is to play an open hand and let them know each stage of the plan well in advance. If we can keep them well fed, entertained and comfortable, everyone might get through this in one piece.

Once the freight elevator had surfaced in the sub bay, it was a simple matter of transferring our supply shipment to a nearby powered cart and six trailers. There was an unavoidable delay as the main airlock ran through its cycle, although it wouldn't take very long to get this lot distributed. I

fully expected a mad rush as soon as the cargo train cleared the airlock. However, a self-appointed squad of porters patiently waited until the train halted in the atrium, then proceeded to distribute the cargo modules to small groups of waiting colonists. It was an orderly and efficient process, performed with an surprising economy of effort. There was a brief moment of awed silence as DIGBY picked up two 100-kilo carboys of Miracle Soup as easily as a pair of light overnight bags, then calmly proceeded to load up the first auto-galley with nutrient mix.

A cryogenically cool move. Shiny.

There is some kind of commotion brewing over in one corner of the atrium. Raised voices and wild gesticulations were reaching the point where concerned heads began to turn.

"Whoa. *That didn't take long at all. The first faint murmurs of discontent... Definitely didn't see that one coming.*" I sub-vocalised.

"*Unfortunate, but sadly inevitable, Captain.*" JUNO added. "*Aggressive and disruptive behaviour is an integral flaw of any social dynamic, regardless of its current circumstances. Do you wish to intervene, Sir?*"

I shrugged. "*Not my circus, not my monkey. I'm guessing he's trying to establish himself as the alpha silverback in this group. Let him blow off some steam, and we'll see how it works out.*"

I walked over to the committee seated nearby. "Héloise, who is that guy?" I asked quietly.

She continued eating, not bothering to look up. It was a carefully guarded gesture on her part.

"Armin Polyakov. One of our *duly appointed* Invigilators. And before you ask, he's not alone."

I caught the subtle emphasis Héloise placed on 'duly appointed'. A standover man. Quite literally.

"What's his beef exactly? Reckon he got a dud meal pack, or is there something else involved?"

"Keep a close eye on him, Selkirk. He's a *molto cattivo* customer. *Fartsovshchik*. Black marketeer. He's suspected of muscling food and supplies from other folks to keep his operation afloat. Of course, we can't prove anything or even make a move on his nasty mates. A few of us have tried, but they're no longer with us... Know what I'm saying, *baas*?"

Suddenly, Héloise raised her voice in a booming yell, sending echoes flying through the cavernous space.

"Armin Mikhailovitch! Will you shut your howling great yap? People are trying to eat here!"

Oh crap.

The yelling stopped. Polyakov's head snapped around in our direction. Yes, he was extremely pissed. I rose from the bench, intending to meet him halfway. He shoved past me with an incoherent snarl. Before I could stop him, Polyakov strode angrily up to Héloise, his thickset face beet-red with fury.

Polyakov actually stood head and shoulders above me. Judging by the force of that half-hearted push, he might even be able to do some damage before JUNO and Co. could get to him.

Warning! Extreme danger, Will Robinson!

"What was that you said, you ratty old *soomka*?" He rumbled menacingly.

Héloise smiled sweetly. "Oh, I'm sorry. Didn't realise you couldn't hear me over that *bakana* racket you was making. Here it is again... Will. You. Shut. Your. Howling. Great. Yap. - *Alles klar, Tovarisch?*"

I shot a beseeching glance at Héloise.

Aw, come on... Seriously?

Polyakov's face went straight from ruby to infra-red. He bunched a fist the size of a Christmas ham. My left arm shot out, fingers catching his wrist before his hand could finish closing. I squeezed his wrist firmly, just enough to let him know who was on the other end of that arm.

"Don't." I hissed, adding a few kilopascals for emphasis. "*Gospodin*... Please apologise to Mme. Maida and kindly return to your meal. You must be quite hungry." I said, smiling pleasantly.

I relaxed my grip. Polyakov angrily shook himself loose. He pushed his face close to mine. *Lovely*.

"Stay out of this, *boet*. It's none of your ruttin' business. This pack of dogs want to sell us to you tin *bliksems* in exchange for a belly full of food and the promise of soft beds. That makes it *my* business. House Torgal is dead as *gosa*, and now we're expected to go belly-up for *House Robota*? Pfft! Makes me want to *kek* my guts up just thinking about it, man!"

I had a pretty fair idea where he was taking this. By this time, JUNO and DIGBY were slowly and unobtrusively making their way toward this charming tableau. IANTO had positioned himself alarmingly close to Polyakov's thugs, although to the casual eye it seemed that he was still deep in an animated show and tell session with a clutch of enraptured youngsters. He had been playing holograms of *Manannán*'s friendlier life forms to entertain them, and every step of his lively antics *just happened* to take him a little closer to the Goon Squad's general vicinity.

"Nothing of the sort, Mister Polyakov. Look, we can discuss this reasonably. Tell you what, I'll get us some good-sized mugs of *chai*, and we'll sit somewhere a bit quieter. I'll tell you everything that you want to know, a one-to-one briefing... Okay?"

I excused myself and made my way over to the auto-galley. Bit of a problem. No coffee machine.

Feeling rather sheepish, I called back over my shoulder. "Hang on a sec, folks. I forgot to attach the drinks stations to these gizmos. Sorry about that."

After nano-lathing coffee machines on both galley units, I called up a couple of trays laden with steaming mugs of *chai*. I picked up both trays and weaved through knots of strolling colonists like a veteran Parisian waiter. I set them on a nearby stone table, taking a modest bow.

"Please, help yourselves. *Dozo*."

I collected two mugs from the tray, graciously offering one to Polyakov.

"Here you go, *bratets*. Let's find somewhere else to sit."

Grudgingly, Polyakov accepted.

We found a small niche along the portside wall of the atrium. It had been carved out of the basalt, cunningly shaped to form a curved bench and a low-set table. A capital spot for an in-depth conversation.

I sat down and took a grateful sip of my *chai*. Polyakov glared balefully from the shadows, remaining stubbornly silent. I took another invigorating sip, smacking my lips with distinct pleasure. Splendid. A most excellent *chai*. He sat and fumed. His mug remained untouched, slowly cooling as the minutes ticked by. Such a pity. I smiled in his face and let the moment hang unspoken, each second precisely calculated to completely irritate the living crap out of him.

I set my mug down on the basalt table and leaned forward a little. Polyakov's expression had shifted imperceptibly from a glare of pure hatred to a disdainful sneer over the past few minutes.

"Mister Polyakov... May I call you Armin?"

Polyakov grunted dismissively.

"I'll take that as a yes." I said, smiling. "Armin, as I mentioned earlier, my colleagues and I wish to assist the colonists in this base. There are no ulterior motives behind this gesture. No hidden agendas, in spite of what you may think. We have no intention of exploiting these people in any way, shape or form. If additional labour resources are required for any of our projects, we either fabricate more automated drones or devise purpose-built amplification systems for our bodies."

He was beginning to look slightly bored already. Not much of an attention span, apparently. I took another swig of *chai*, inwardly amused as his body tensed in anticipation of a surprise attack that never came. Sorry to disappoint you, Pally.

"What exactly do you do here, Armin? - Your function within the colony, I mean." I asked casually.

He favoured me with another dirty look before replying.

"I am Invigilator here. My five deputies watch over the colonists and protect them from harm. Now you are coming here and making trouble for everyone." He rubbed his jaw speculatively. "I think this could end very badly for you, *Roboto-san*. You should leave now, while my mood is still good, eh?"

"Protect the colonists, Armin? Protect them from what, precisely?" I asked innocently. "You're in a closed ecology, sealed off from any hostile life forms by a pair of two metre-thick titanium alloy pressure doors. What additional defensive benefits could you and your men possibly provide?"

His face soured. "We protect colonists from themselves. Nobody makes any trouble here."

I leaned back against the bench slowly, making a show of getting myself more comfortable.

"I'm not sure if anyone here has enough energy to spare for causing a ruckus, Armin. By the way, I couldn't help but notice you and your mates are a braw and bonny bunch of lads. All fine specimens of manhood, despite a woeful lack of edibles in these parts. How is this possible, Armin?"

"Extra rations. An Invigilator and his men must be strong." Polyakov muttered truculently.

"Aye. I can tell you've been eating your Weeties diligently every morning... And most likely, someone else's as well. Just a wild guess. Now, regarding your highly public display of dissatisfaction a few minutes ago. Is there anything you'd care to tell me about that?"

"*Nyet*. It does not concern you. You should leave here, *now*."

"Ah, but it does concern me, Armin. I am concerned that someone might be running a shakedown operation in this colony. These people are doing their level best to stay alive in the face of severe hardship. The very last thing that they need is some standover merchant and his mates leeching off their hard work and providing absolutely nothing in return. Do you hear what I'm saying, Armin?"

I noticed Polyakov's knuckles beginning to turn white. Our eyes locked.

"Armin, unless you are about to begin a game of 'One Potato, Two Potato', I suggest that you put those things away before someone gets *very* badly hurt."

Polyakov pushed his hulking, pockmarked face close to mine and grimaced. It was not a pretty sight.

"You talk too much, Selkirk. Maybe you lack the *chto eto slovo Angliskii*... '*Conviction*' to follow your fine words with strong actions, yes? Maybe you are not all the man you think you are, *Robot*."

I shrugged. "*Eto pravda*. Yes, I would rather talk than fight, mainly because people die when they come gunning for me. Another Invigilator wanted to see me dead so much, he dragged himself and 249 of his shipmates straight to Hell. Armin, I'm only going to say this once... There will be no more shakedowns. No beatings or sabotage. No more protection rackets or reprisals. As of now, everyone in this colony is under our protection. Understood?"

He seemed to consider my words for at least five seconds, then shook his head slowly.

"We may find ourselves having another nice talk like this sometime soon, I think. Your friends will not be around to help you. Then we will see who is more of a man. I promise you, this will happen."

I smiled agreeably. "Fair enough, then. We've both spoken our piece. Might as well get back to the others before they start spreading saucy stories." I stood up and began walking to the centre of the atrium. Suddenly, I stopped and turned back to Polyakov.

"By the way, I'd like to show you something, Armin. We were having such a good time chatting, I almost forgot to mention it to you. It'll only take a minute or so."

I led Polyakov over to the archway leading into the central access corridor.

"See those four ExoSuits parked at the end of this corridor? Watch closely."

All four ExoSuits rose slowly and simultaneously. When they reached a fully upright stance, their Gauss cannons whipped up into firing position. Four laser targeting points appeared on Polyakov's chest, spaced precisely 25mm apart. I pointed at his chest, indicating that he should look down.

"Space is crawling with vermin just like you, Armin. Men who profit from the suffering of others. Believe me, I'd turn you into a cloud of red mist without the slightest flicker of remorse. Ironically, you now owe your life to the same colonists you've terrorised and exploited in the past. Some of them are standing in the line of fire directly behind you. This must be your lucky day, mate."

All four laser markers slowly converged, forming a single, intense ruby dot. It tracked up his sternum rapidly and unerringly, coming to rest in the dead centre of his forehead.

"On the other hand, you're a right lanky bastard. We might be able to pull off a trick shot."

I waved my fingers slowly in a childlike gesture of farewell. "*Do svidaniya, Tarakan.*"

The lasers flared briefly, scorching a small, dark *bindi* upon his brow. Polyakov yelped in anguish and fell to the deck, whimpering.

"Aw, *hauld yer wheesht*, laddie. It's barely nothing at all. I missed your brain entirely."

I hauled Polyakov to his feet and seized him by the throat. There it was, in his eyes. He *knew*.

"I could end this right now. Just a bit more pressure, and there would be a .90 calibre hole straight through your carotid artery. No problem at all. When I let you go a few seconds from now, there will be no threats, no shouting, no fuss. You will walk back and quietly join your mates. In future, if you think you might stand the slightest chance against me, kindly make your move when there's no-one else around. No collateral damage to innocent bystanders. Understood?"

Polyakov nodded, slowly and carefully. I released my grip.

"Excellent. It appears you are a reasonable man after all, Armin Mikhailovitch. *Spasiba.*"

I turned my back on him, a deliberate gesture of dismissal. Instead of rejoining the gathering straight away, I walked over to the alcove where we had been sitting. Polyakov's mug read 46.2 Celsius. Slightly tepid, but still quite drinkable. No sense wasting good *chai*. By the time I finished, Polyakov had returned to his friends. I watched their discussion in a half-hearted sort of way, not even bothering to lip-read what was being said. From what I could tell, his deputies were obviously straining like hounds on a leash, although Polyakov's behaviour seemed irritable and uncommitted. Judging by the way he kept glaring at me, I conjured he'd be biding his time until conditions were more in his favour. That suits me just fine.

"How was your little talk with our friend Polyakov, *baas*?" Héloise enquired brightly. "He seems to be much quieter now. He is a changed man, *verdad*?"

"Hardly. If anything, he's even more dangerous now." I said quietly. "I've just kicked two legs off his tripod, and there's no telling which way he's going to fall."

Héloise stared at me blankly. "What do you mean?"

"By installing those auto-galleys, I've effectively destroyed his main source of income. He was able to coerce other colonists with threats of violence, offering 'protection' from his bully-boys in exchange for more than his daily share of rations. Presumably, those stolen rations could be turned into moonshine alcohol or sold back to others in exchange for scarce or desirable commodities. Now

that everyone has unlimited free access to the auto-galleys and eventually, some basic functions of the Fabricators, his currency of trade has become completely worthless. His second leg so to speak, was his physical strength and the perceived aura of authority it gave him. Now that we're here, he's no longer the Big Man on Campus, and I'll bet that's causing him no end of grief."

I frowned meaningfully at Héloïse.

"For reasons best known to themselves, *Someone* forced our hand today. I'm an engineer. I prefer getting all of my ducks in a row before committing myself to any decisive action. It prevents unwelcome surprises... Usually. However, there are only so many x factors that can be offset by adequate contingency planning, otherwise I'd never get anything done. After that, I go with my gut."

Héloïse grinned slyly.

"There's no such thing as 'omniscience' in my book. Careful observation, meticulous planning and situational flexibility is often mistaken for some sort of divine skill, but if a lot more folks took this approach, we'd all be a better people for it. Hell, I don't even get out of bed without a plan."

"You handled Polyakov well then, under the circumstances. I am Li Huang, colony administrator."

"A pleasure to meet you, *meneer*." I said, shaking his hand. "Our original intent was to render assistance with as little internal disruption as possible. However, I fear this is no longer an achievable goal. I have already considered the possibility of placing Polyakov and his deputies in confinement, although this step would not have been taken without prior consultation with the colony committee. After evaluating many possible consequences of this course of action, I strongly recommend that we allow Polyakov to remain at liberty, at least for the time being. The situation is extremely volatile at present, and any complicity in removing Polyakov from office might be construed as a prelude to installing ourselves in his place. Naturally, the colony's committee would also be implicated in this action. We genuinely wish to offer further assistance, although it is absolutely imperative that this colony remains autonomous."

An elegant middle-aged woman signalled politely for my attention. I extended my hand in greeting.

"Gita Patel, colony science advisor. Mister Selkirk, what are your plans for our accommodation? Are we to occupy one of your existing facilities, or do you propose to construct a purpose-built base more suitable for human occupation? Not that I mean this to sound insulting in any way, but we require a medical centre, sanitary facilities, private accommodation berths and equipment to cater for our people with special needs. As androids, you and your companions would find most of these things entirely unnecessary."

"A very reasonable question, Mme. Patel. We plan to build an underwater habitat on the floating island named *Kaori-san no-shima*. More precisely, a one-atmosphere complex that runs entirely around the perimeter of the island at the 20-metre submersion mark, providing inhabitants with easy access to the island's surface areas, without requiring decompression before exiting the base. All facilities will be provided for you, including entertainment areas, science modules and vehicle bays. Please compile a list detailing all of your specific requirements, and they will be incorporated into the final design. I have an initial design model of the proposed facility already prepared. If you

wish, I can show you what it will look like as a holographic walkthrough. Incidentally, please feel free to comment on any aspects of this facility during the presentation."

Alexander F. Selkirk, unreal estate agent.

The truth is, I already had most of this design nussed out right from the start. *Kaori-san no-shima* is a relatively safe location to establish a base, and the island would be an absolute visual delight for anyone who's been trapped in a grim basalt fortress for most of their life. I could even rebuild *Margaritaville* and personally run it as the island's restaurant and nightclub. If *Manannán's* about to get a permanent human presence against all odds, there's no reason why we can't kick up our heels every once in a while. What the hell, we might as well make the most of it while we still can.

On the whole, most of the colonists seemed excited by the prospect of occupying this new base. There were definite 'oohs' and 'ahhs' expressed during the virtual walkthrough, and rightly so. We are offering five-star accommodation and knockout natural views to people more accustomed to blank basalt walls and brutally utilitarian furniture. After putting in a few hours of honest graft looking after the aquaponics bays or attending to the base's rather modest maintenance requirements, most would be quite content to flop back on one of *Margaritaville's* sun lounges and watch the remainder of the day cruise by. Naturally, some took a more critical view of what we were offering, suspecting some kind of Faustian pact is attached to this arrangement. I did my best to reassure these people that this deal is being offered with absolutely no strings attached.

My sales pitch wasn't all sweetness and light. I had to emphasise that *Manannán's* resident environmental hazards were considerable and definitely not ones to be taken lightly. I'd like to think that my holographic animations of Reapers, Crashes, Biters, Bleeders and the planet's shark analogues drove the lesson home, although there were bound to be some bravos who thought they'd be equal to the challenge. Admittedly, I spent a good portion of this time talking about Warpers, Leviathans and *The Father of Tides*, placing particular emphasis on their intelligence and unique powers, along with a brief roundup of how these creatures were intimately bound to the planet's ecology. In a nutshell, I explained that if you get on the wrong side of these chaps, you'd best leave your last will and testament someplace handy. In most cases, that should suffice.

All up, the colony contained 64 inhabitants. JUNO and IANTO were running a triage clinic during my real estate presentation, mainly to collect general information and baseline health data from the colonists. As previously noted, their overall standard of health is remarkably sound. Some of the colony's younger children presented with mild intellectual disabilities, presumably due to declining O2 concentrations in the habitat's atmosphere. In IANTO's opinion, most of these children would require little more than specially tailored learning programs to bring them back up to speed. Only a handful of the original colony's elders remained, and all were quite infirm. There was little we could do for these fragile souls from a medical perspective, although their remaining years would at least be spent in some appreciable measure of comfort and dignity.

When all was said and done, we took our leave of the colony. Generally, the colonists seemed quite receptive to the idea of relocation, although they would still need time to consider our offer before responding. Polyakov and his mates did their level best to present a surly and disinterested front to our proposals, although I couldn't help but notice some of these bruisers appeared to be visibly wavering in their declared support for The Big Feller. Before leaving, we installed commlinks and

info terminals at various points in the base and issued the colonists with wrist PDAs, then ran them through a quick tutorial session to get them connected to our central network. Basically had them all neatly bagged and tagged in one (comparatively) smooth operation.

The subject of surveillance is an awkward one. It was never our intention to re-mould these 'Morlocks' into a herd of docile Eloi. Belters are essentially a hard-working and stoic people, fully capable of carving the heart out of an asteroid and turning it into a self-sustaining colony purely by the sweat of their brows. Their indomitable spirit of self-reliance has defined them as a people, although it would be something of a skilled juggling act to allow them to progress naturally under far more relaxed living conditions. A society without challenges soon stagnates and decays. However, we still need to observe the Belters from a respectful distance. At least six of them, in particular.

Three days later, the colonists responded.

The committee's faces appeared on the main screen. Their expressions gave nothing away, although I suspect that this final decision didn't come easily. In a way, I respected the Belters for taking this length of time to consider our offer. It appealed to the engineer in me. Weigh the pros and cons according to their merits, carefully consider all possible alternatives and then form a decision.

"Mister Selkirk, the committee wishes to advise you that your offer has been accepted." Li said.

"Excellent news, Mister Li. Please transmit your colony's facility requirements and any proposed structural changes to the new base. I will also require an estimated cargo manifest of all equipment and personal effects scheduled for transfer. We shall commence preparations as soon as this information is received. Estimated construction time for the base currently stands at 10 days. Please keep us apprised of your progress, and do not hesitate to call us in the event that you require any assistance with your preparations. Thank you all, ladies and gentlemen."

Just as I was about to disconnect the commlink, Gita Patel spoke.

"*Namaste*, Mister Selkirk. I have one final question, if you don't mind."

"*Namaste*, Mme. Patel. Please, go ahead."

"During our previous discussion, you mentioned that all colonists will require a 30-day decompression cycle before being allowed to venture topside. I understand your need for caution, although it is not necessary for all colonists, surely? All of our divers and hyperbaric environment workers routinely decompress before re-entering the colony, as I'm sure you're fully aware."

"Absolutely correct, Mme. Patel. That was extremely sloppy language on my part, and I sincerely apologise for any confusion this may have caused. The 30-day cycle is intended to safely and gradually acclimate all colonists to atmospheric conditions on the surface. You are currently breathing a significantly depleted mixture of gases, and I am taking this step purely as a safety precaution. However, I fully appreciate your concern."

The viewing screen faded. I turned to the crew with a grin.

"It's a done deal, then. Let's get cracking, troops."

Unfortunately, there are no 'off-the-peg' Alterra designs for a deep-submersion personnel transport of the dimensions I had in mind. It took the best part of a pot of Darjeeling tea before I came up with a design that satisfied all operational requirements. This vehicle wasn't particularly pretty to look at, although it would do its job like a boss. The DSV '*Exodus*' looked like a school bus had mated with a wide-track bulldozer, and neither parent would be happy with their offspring. Its unfortunate appearance aside, *Exodus* could carry 100 passengers and cargo to a depth of 5,000 metres in complete safety. However, I was a bit concerned by its low speed of 20 knots at full thrust, although some hefty defensive armament would increase the vehicle's survival rating. There wasn't really much I could do to refine its hydrodynamic profile though, apart from losing the caterpillar tracks and replacing them with gravity lifters and omni-directional wheel pods. This would also lower the vehicle's centre of mass considerably, and allow it to pass through the colony's main airlock with ease. Looks like we've got the moving van sorted, at least.

I think it might be an appropriate time to visit the Talking Wall again. I've had to make a few modifications to our 'community notice board', mainly because free space became something of a scarce commodity in the later years of my life. There is also an element of artistic sensibility behind this decision, since some of those illustrations could be considered actual works of art, and I feel that they're definitely worth preserving. I am particularly fond of what the Warpers have created there. My contributions are merely engineering drawings with a bit of embellishment, although there is an eerie, otherworldly beauty to the Warper pictographs that will give you the shivers.

A purpose-built communications panel is now embedded in the north face of the plinth supporting the *Aurora* monument. It's essentially a series of touch-pads designed to allow Warpers to control a holographic avatar, and this enables them to communicate remotely with us. Think of it as *Manannán*'s version of social media, minus the funny cat pictures. Of course, I could post my message to the Warpers without leaving the bridge, although I felt that this news is far too important to be delivered in any other way but in person.

Not only that, I'm always up for any excuse to get wet.

Disco Volante dropped from its docking clamps, and I was away. ExoSuits are fine for shouldering one's way into somewhere bristling with teeth and claws, but there was something about a *Seamoth* that connected a body with the sea in a right and proper fashion. Apart from depth upgrades and a more energetic drive system, I hadn't fiddled around with its basic design beyond a certain point, mainly because I preferred this vehicle for its size, speed and agility. Just between you and me, piloting a *Seamoth* is the next best thing to being a fighter pilot. *Yee-hah*.

I was hoping to see at least a few Warpers on my way over to the monument, although there doesn't seem to be any in the immediate neighbourhood. Mind you, that doesn't mean a whole lot where Warpers are concerned. They have an unsettling habit of popping up unannounced. I wouldn't call it an inherent social failing of this species, although it can lead to some awkward moments if you're not prepared for the encounter. It's particularly rough on humans, as I will attest from personal experience. If it feels like there's someone playing the Anvil Chorus on your cerebellum, you can bet your last Credit there's a Warper somewhere nearby.

To make absolutely certain my message reached the Warpers in a timely manner, I activated the comm system's call tone well in advance of my arrival at the monument. It shouldn't take too long before one appeared. To be on the safe side, I eased back on the throttle and cruised in at a brisk swimming speed. Although they are well accustomed to our vehicles, Warpers still get a little antsy when one comes barrelling past them at speed. I've often thought of putting up a couple of 'Warper Xing' warning signs on the seafloor, if only to mess with the next human expedition that arrives here. Not much chance of that happening anytime in the foreseeable, though.

Sure enough, a Warper is already waiting at the monument. It gestured to me in greeting. I exited Disco Volante and activated my holographic camouflage field, precisely imitating the shape and motions of a Warper.

"Warm seas, friend. This one brings words for The Father of Tides."

The Warper made a complex sign of reverence. The actual meaning of this gesture defied any attempts at analysis, although I suspect it meant something along the lines of 'hallelujah' or something of that genre. As it seemed to be The Done Thing, I repeated the gesture as a courtesy.

Now that we had all the social niceties covered, it was time to get down to brass tacks. Warpers are highly suspicious of anything that resembles prevarication or subterfuge in a conversation.

Rule One: Always be direct and cut straight to the chase. Remember, these chaps are skilled telepaths. They don't have to understand Standard Anglic to know when someone's up to no good.

"This one speaks for Lost Ones from beyond sky. This one make new shell for Lost Ones on floating land below sky. The Father of Tides allow Lost Ones (to) swim free or break shell?"

"Same Lost Ones (who) take The Father of Tides?" The Warper inquired, bristling suspiciously.

"Not same. All gone many tides. Lost Ones all new. This one make Lost Ones swim free. The Father of Tides make Lost Ones swim free?"

"This one speak these words to The Father of Tides. Stay."

In spite of their comparatively small vocabulary and its odd grammatical structure, Warper 'speech' is still a tricky business. Their version of a spoken language is almost an afterthought. I assumed it's far easier for them to mentally process raw emotional states and other abstract concepts than it is to articulate their thoughts without access to an extensive vocabulary. Although it's tempting to gently prod this species into developing its own written language, that's not my call to make. There are inherent risks involved with 'boot-strapping' alien civilizations before they're ready to deal with any radical advances in technology. It might seem like a trivial wee thing, but all language shapes the civilization that it serves. I'd rather not meddle with any latent potential the Warpers might already have. Simply allow evolution to take its course, and everyone will be much happier for it.

After a short while, the Warper returned. In the mean time, I had amused myself by clearing the area of Biters, punting dozens of the little buggers through the water/air interface with cheerful abandon and a souped-up propulsion cannon. I admit, I'm not exactly St. Francis of Assisi when it comes to dealing with Biters, Crashes and Bleeders. Hateful sods one and all, and there seems to be no appreciable diminution in their numbers, despite my most earnest efforts.

I greeted the Warper again, and was pleased to see that its mantle displayed a 'calm' pattern. Good.

"*The Father of Tides says Lost Ones swim free. Lost Ones no break shell of This Place.*" The Warper gestured tersely, stating both the Sea Emperor's final verdict and the conditions binding the colonists to his decision. As long as the colonists abide by this one simple rule, all would be well. I conjured it would be entirely up to me and the crew to make certain that the colonists toed the line.

"*Lost Ones not break shell of This Place. The Father of Tides words hold this one's life. This one holds Lost Ones for The Father of Tides. This Place and all life swim free.*" I swore, signing reverence to bind my words into an unbreakable oath. Oh, boy. I'm definitely going out on a limb for these colonists. Apparently, this unconditional gesture of respect pleased the Warper immensely. It made the sign of reverence and I respectfully reciprocated. A done deal it is, then.

"*Warm seas, friend. Swim free.*" It added cheerfully, then promptly vanished.

After returning to *The Broch*, I assigned the crew to their various tasks. JUNO and IANTO commenced work on the foundations and core structures of the new base. I collared DIGBY to assist me in pulling the tarps off Pyramid Rock, as there are certain items stored there that required a particularly 'quiet' relocation. Now that Polyakov and Co. have been positively identified as a disruptive element, it would be a good idea to remove all potential sources of temptation and place them well out of the reach of inquisitive fingers. My main concern was relocating all of the *Mako* combat subs. I wasn't at all comfortable with the idea of leaving them completely unattended, then having to deal with the consequences of Polyakov getting his hands on one. Although their flank speed of 60 knots made *Makos* appreciably slower than a Gen III Cyclops, those fighter subs are small and extremely agile. This would be a deciding factor in any combat action involving these vehicles. I'd rather not let any situation develop to the point where lethal weapons are involved.

Speaking of lethal weapons, I've given some serious thought to installing a Valkyrie Field system in the colony. This poses a number of significant problems, both philosophical and practical. I have no further use for the Valkyrie Field, mainly because it doesn't work on androids. If my body is damaged beyond the point of repair, it's easy enough to transfer my consciousness to another shell. However, if the body's physical memory core is destroyed, that basically wraps it up for Alexander Selkirk. Stored personality backups can degrade slowly but inevitably. My particular version of 'immortality' is constrained by a need to perform a full memory update every 30 days, without fail. For the sake of convenience, this process has been integrated into my sleep cycle. As a result, my dreams have acquired some rather *interesting* properties of late, to say the very least.

The colonists are an entirely different matter. Although I believe that they have every right to access the Valkyrie Field, this decision is tempered by its potential for some highly unpleasant social repercussions. According to IANTO, there are two inevitable consequences that will arise from operating a Valkyrie Field, and neither of these effects are particularly desirable for the colony's continued stability. With a Valkyrie Field in effect, it might be seen that there are no longer any serious consequences attached to ill-conceived and impetuous actions. People taking idiotic risks for the sheer hell of it may have been considered high entertainment a few centuries ago, although I'd like to think we've moved on as a species since then. Of course, we'll inform the colonists of those potential quantum uncertainty effects before leaving them to their own devices.

At the darker end of the social probability spectrum, recreational murder could become a reality. As you're aware, we already have at least six potential suspects revved up and ready to go. Rather than deal with some blood-soaked parody of Valhalla where combatants are free to hack away at each other with cheerful camaraderie, I'd rather have this society maintain some degree of respect for the lives of others. To this end, we eventually decided upon the 'Three Strikes' exception to be applied in *certain* cases. At this point, we're creeping into some pretty dubious territory. This places me and the crew in a highly uncomfortable position, in that we will effectively wield the power of life and death over these people. As you can probably imagine, this will lead to all manner of social problems somewhere further down the track. When I joined Alterra Corporation, establishing a pantheon of 'omniscient' cyber-deities was the very last thing I had in mind as a career path.

In retrospect, I should have become a wombat rancher instead.

"You seem unusually preoccupied today, Captain." DIBGY said quietly. "Is there anything wrong?"

"Polyakov." I said bluntly. "I'm still figuring out the safest way to deal with him and his cronies. The most logical approach is to keep those scunners too busy to get into any serious mischief, but doing what exactly? - Polyakov definitely won't be playing his unique version of the Invigilator game again, particularly if I have any say in the matter. I considered having them man the colony's defence turrets, although there's too great a risk of them getting bored and taking pot-shots at the planet's more significant life forms. All it takes is another dead Warper, and we're back to Square One."

"However, you might be on the right track, Sir. Polyakov's team will need reassignment to other duties more suited to their relaxed living conditions, although I am currently at a loss to suggest any potential choices of alternate vocations. Hmmm... This problem is a particularly thorny one, Sir."

I chuckled briefly. "I've already thought of one. Not entirely certain that Polyakov and his Blue Meanies would enjoy working as bouncers in *Manannán's* first underwater disco, though."

DIBGY grinned. "Actually, I have reason to suspect that they would. Rather too much, in fact."

We returned to work. Shortly before noon, all eight *Makos* had been unpacked from their transit cradles and launched by the *Ripleys*. As soon as we finished loading *Ulysses* with medical supplies, food and assorted stores for the colony, our convoy could set sail for *The Broch*. We didn't actually need the *Makos* for protection, although it was more convenient to bring the whole squadron across in a single operation. To tell the absolute truth, I was unrepentantly kid-eager to see how these combat subs performed under remote control, especially since I was going to be the one piloting all eight at once. That should give the old parallel processors a vigorous workout.

The *Makos* were already equipped with a JUNO-class AI, and it was necessary to politely ask her permission before assuming control of the squadron. I opened a communication channel, linking the squadron directly with our JUNO Prime, effectively updating the sub's resident AI cores to the definitive version that we all know and love. The whole process only took a couple of minutes in real time, and saved me having to wade through a boatload of official cybernetic rigmarole involving authentication, command over-rides and whatnot. It was far easier to ask JUNO herself if I could simply borrow these puppies for a while. Unsurprisingly, she said yes.

"*Ulysses* is standing by and ready in all respects, Sir." DIBGY announced from the helm station.

I settled into one of the passenger seats and made myself comfortable. Taking a deep (and totally unnecessary breath), I closed my eyes and reached out to the *Makos* with my mind.

"*Mako* onboard systems checks confirmed. All units online. Positioning manoeuvres commenced."

Although I have assumed remote control over vehicles before, this experience was slightly more involved than making four ExoSuits do my bidding. This time, I have to contend with movement in three dimensions. I started out rather tentatively at first, moving just one sub at a time to get a proper feel for the frankly bizarre sensation of 'being' in all eight subs simultaneously. After a few minutes of careful exploration, I found that the process became considerably easier if I thought of the squadron as a single entity, and then gradually allow each unit to function independently of the others as my skill and confidence increased. Within ten minutes, I had a pretty decent handle on it.

"Ahead dead slow, DIGBY. Swing wide around *Aurora's* bow and set course for *The Broch*."

"Ahead dead slow. Aye, Captain."

As soon as we cleared the field of underwater spires surrounding Pyramid Rock, the convoy submerged to fifty metres and increased speed to 15 knots. I pre-positioned the *Mako* squadron into a loose defensive box centred on *Ulysses*, and then began practising various formation manoeuvres while under way. Let me tell you, processing a constant stream of information from eight different sources is every bit as tricky as it sounds, and I had to stay completely focused on the squadron as a whole rather than dealing with each element as a separate unit. I believe Shrinks refer to this method of information processing as a *gestalt* model, and I was starting to get a good idea of how this 'swarm control' technique could be applied to other situations.

The *Makos* were currently cruising in two stacked diamond formations around *Ulysses*. When I brought the uppermost flight down to the same depth as the lower flight, I noticed a faint return developing on the passive sonar. Although the contact was ill-defined and kept ghosting in and out, it was obviously moving slowly towards us, using the acoustic bottom clutter of the Mushroom Forest as cover.

"DIGBY, are you seeing this? I think we might have picked up a tail."

"Affirmative, Captain. What are your orders, Sir?"

"Proceed on course. I'm keeping a close eye on this contact for the time being. If it makes a move, we can simply outrun it. The *Makos* aren't carrying any heavy-duty ordnance, and it probably wouldn't be a good idea to send any of them in to investigate. It could provoke an aggressive response. Remember, I'm on a promise with *The Father of Tides*, and he might take a pretty dim view of us using any of his high-end subjects for target practice."

"Duly noted, Sir. Our relative proximity to Pyramid Rock suggests that this contact may be the Reaper Leviathan designated 'Binky'. However, this stalking behaviour is entirely atypical of that particular specimen. Naturally, I recommend that we proceed with extreme caution."

"That makes this encounter all the more intriguing, then. Binky usually prefers to come barrelling straight in, roaring his head off. He's generally straight to the point and refreshingly direct. This change in behaviour may have a wider significance, particularly if it isn't a one-off aberration."

The seafloor changed abruptly at the edge of the Mushroom Forest. We were now transiting the Koosh Zone. Our sneaky friend would have slightly less physical and acoustic cover to play with now, although this area provided a fresh complement of environmental obstacles to bedevil our sensors. The EM emissions of Amp Eels and the intermittent rumbling of magma vents could be masked out to some extent, although the passive sonar image would lose a great deal of its resolution in the process. It seemed like our best bet was to weave a precise path skirting the region's acoustic hot-spots, and hope that our contact's location would be revealed by the 'shadow' it threw. If you can't see something that's tracking you down, you'd better start looking for a hole in the water. Being far too quiet in relation to your surroundings is every bit as revealing as banging away with active sonar.

Rookie mistake, Jimmy.

From what I could see on the sonar display, it was time to take this business a wee bit more seriously. Binky's sonar trace had firmed up considerably as we passed through the magma vent field, and it was all too obvious that he was lining us up for an ambush. However, the attack wouldn't come from him directly. Binky was only there to make sure we kept moving away from him and straight toward where he wanted us to be. To be certain, I instructed DIGBY to make a couple of deliberately random deviations from our programmed course. Sure enough, Binky changed his approach vector every time we changed our heading.

We are now 300 metres from Aurora's portside bow. Only a low tangle of girders still remained on the seafloor, although they would make a perfect hide for a hunter waiting in ambush. This area was Ahab's old manor, and Binky is relentlessly herding us straight into his parlour. My tactical analysis was absolutely rock-solid on this probability, although I was curious to see exactly how they intended to carry off their plan. Neither Reaper has fared particularly well against *Ulysses* in past encounters, and it appears as if they've decided to buddy up in the hope of changing the outcome this time around. A Gen III *Cyclops* is tough old bus, although I'm starting to have some serious doubts about its ability to withstand two Reapers attacking it simultaneously. The *Makos* aren't going to be much help in a close-in knife fight either. Those 25-kilowatt argon pulse lasers lose most of their punch at any distance over 50 metres, and I'm not at all comfortable with the idea of being the centrepiece in an undersea furball with laser beams flying all over the place.

The longer I thought about this, the less I felt inclined to stick around. Something's not right here.

"Helm to 110, increase speed to 30 knots."

"Helm 110, 30 knots. Aye, Sir." DIGBY responded crisply.

Ulysses veered away sharply, swinging wide of *Aurora*'s bow. The *Mako* squadron followed, shifting into a defensive box formation as soon as there was sufficient sea-room to permit this manoeuvre. We were going way too fast to use passive sonar now, although it was a certainty that we hadn't shaken our pursuers yet. I estimated that the convoy was well clear of the ambush point by now, and ordered another abrupt course change to 270 to bring us back onto our intended return track.

Looks like we're going to be running a gauntlet. Reckon it's time to beat those bushes up ahead.

"All *Mako* sonar arrays are slaved into *Ulysses*. Give me a ping."

DIGBY looked at me incredulously. Even so, he reached out for the activation pad, his hand poised.

"Captain?"

"Give me a ping, Vasili. One ping only, please." I said calmly.

DIGBY tapped the panel, activating the entire convoy's sonar emitters simultaneously. A single 10-kilowatt pulse boomed out, lighting up the surrounding ocean with the acoustic equivalent of a mini-nuke. The sonar return from that snapshot was miraculously sharp, consisting of a single image that showed us exactly where all the pieces sat on the board. Two contacts lay astern at 300 metres and were closing rapidly. That would be Ahab and Binky, of course. Not a big surprise.

One contact, directly ahead at 500 metres range. Carrie. Ahab's missus. *Huge* surprise.

"TRIDENT online, 5 per cent output. Repulsion cannons acquiring target." DIGBY said tersely.

"Advance speed to 60 knots. Carrie's the cork in this bottle. A sharp smack to the mush should be enough to shove her out of the way. Open fire the second she comes into range."

"Aye, Sir."

I commenced scanning with the *Mako* active sonars as *Ulysses* commenced its run. Apart from providing a real-time picture of the situation as it unfolded, I figured the racket the sonars were making made would also disorientate the Reapers sufficiently to give us a decent fighting chance. Two hundred metres out, Carrie surged forward at top speed. Here it comes.

Hammer and anvil time.

Without warning, three sonar blips suddenly appeared below the port side of the convoy, rising fast. *Makos Three, Five and Seven* went dead, blind-sided by three hidden Reapers that had been lurking in the trench below. As all three stricken fighters whirled out of control and augered into the sandy bottom, I struggled to retain command of the remaining five. Although there was no actual pain when the *Makos* dropped offline, their abrupt disconnection hit me with the force of a sandbag to the side of my head. It took at least five seconds to regain my bearings after this sickening feeling of dislocation. I suppose that this sensation was entirely mental in origin, an unwelcome sensory leftover from my flesh and blood days.

The Reaper juveniles wheeled about from their first charge and turned in to attack *Ulysses*. My remaining *Makos* broke formation as a starburst, each sub streaking clear of *Ulysses* to commence their attack run. Obviously, the Reapers had set up this ambush with particular care. The massive berm of sand heaved up as *Aurora* slid to a halt lay to starboard, restricting our manoeuvres considerably. Likewise, the *Makos* could only make strafing runs at targets on *Ulysses'* port side, or they would be picked off by the juveniles as the fighter subs slowed and turned to avoid running into the towering sand-bank.

Rather than slaughter the Reapers outright, I deliberately tuned the lasers low to deliver painful flash burns instead. This would either discourage the Reapers or enrage them to the point where nothing short of absolute carnage would end this encounter. Given that Ahab and Binky were still closing in, I wasn't entirely certain that we'd make it through this in one piece. If all else failed,

Ulysses could sprint away at flank speed and leave the *Makos* to fend for themselves. At this point, I could safely consider the fighter subs to be expendable, serving only as a distraction while *Ulysses* broke contact with Carrie. Our main objective was to put the *Makos* well out of reach anyway, and if it comes to them getting chomped by a pack of Reapers, so be it. Truth be known, the *Makos* weren't particularly useful to us in their current configuration, and any that survived this unholy mess would require extensive refits before they could outmatch a Gen III *Cyclops*.

Ulysses surged forward at 80 knots, opening up with a barrage from its TRIDENT array. The phased-array sonar pulses slammed into Carrie, stunning the Reaper instantly. The forward repulsion cannons thudded heavily, swivelling in their turret to steer the Reaper's inert form out of *Ulysses'* path as it sped onwards. Enraged, Ahab and Binky screeched in unison, increasing their speed to close the widening gap between them and *Ulysses*. I brought the *Makos* around for one final pass on the pair, hoping to distract them for just a little while longer. I scored a couple of quick hits on the older Reapers, then set the squadron on auto-pilot and gratefully punched out of the cyber-link.

"It would appear that our safe-passage arrangement with *The Father of Tides* has expired, Captain." DIGBY observed wryly.

I snickered briefly, waving his comment away dismissively.

"I wouldn't be so certain about that, mate. It could be said that almost every sentient on this planet respects the Sea Emperor to some degree, although only the Warpers have demonstrated what might be considered a distinctly religious inclination. The way I conjure it, He's probably regarded as a hands-off kind of deity. Less of a 'Thou SHALT Not...' and more of a 'Do what thou wilt' type of guy. I'm also guessing that Reapers aren't what you'd call regular church-goers, either. Can't imagine them getting togged-up in their Sunday best and belting out '*Bringing In The Sheaves*' with any real enthusiasm. Reapers are damned intelligent, but they're also the local bad guys. Never forget that. Mind you, there's still some serious beef between them and our Cyclops fleet. I'm guessing that they consider our boats to be a rival predatory species, and simply attacked us to get in among the *Makos*. Thin out the competition's numbers by going after its young. Pure instinct."

"An interesting hypothesis, Captain." DIGBY agreed. "Admittedly, we haven't been attacked while free-swimming or piloting a *Seamoth* in well over a century, so we may assume that this is indeed the case."

"I'm inclined to be charitable here. We'll work under the assumption that *The Father of Tides'* protective *geas* is still in effect, and simply write this episode off as a 'Reapers doing what Reapers do best' type of thing."

"I assume that would be 'behaving like total dicks', Sir." DIGBY deadpanned.

"Something like that."

Back at *The Broch*, we reviewed the video feed obtained during the Reaper attack.

IAN TO frowned. "This does not look good at all, Sir. Reapers used to be exclusively solitary in their behaviour. Now we are witnessing active collaboration between individuals previously considered to be deadly rivals. I have been unable to determine their mode of communication as yet, although

I strongly suspect that it could be some form of low-level telepathy, given the remarkably precise nature of this attack. Infrasound is also a distinct possibility. Unfortunately, there was too much active noise in the water to permit an effective frequency spectrum analysis."

"Communication and co-operation among individuals of the same species is a natural behaviour trait." JUNO observed. "However, mounting an attack at this level of complexity implies that Reapers are actively sharing their knowledge of our current standard tactics, and they are fully capable of developing effective countermeasures to them. In short, I believe that we may have grossly underestimated their intelligence. To put Reapers into a proper perspective in terms of their demonstrated intelligence, they are *Manannán's* equivalent of killer whales. Their emergent pack-hunting behaviour is completely unprecedented, and extremely worrisome in its implications for the colonists. For the sake of all parties concerned, we would do well to avoid all further contact with this species wherever possible."

"Avoidance is only a sound strategy when you already know where the other guy is hiding." I said. "Sooner or later, those Reapers will probably come looking for us. This isn't an issue in itself, although they'll probably encounter the colonists first. *That* is going to be a real problem. Basically, our hands are tied here. We can't pre-emptively kill off the Reapers to protect the colonists, and we can't give the colonists access to lethal weapons or military-grade subs. The very most that we can do at this point is to provide their base with a powerful defence system and hope for the best."

DIGBY nodded in agreement. "I concur, Captain. Although the colonists' safety is our primary concern, this obligation must be handled with the utmost delicacy. As we have guaranteed them complete autonomy, they may not permit an AI construct to be installed in the base, even if its only purpose was to control the colony's power, life support and defence systems. I believe that a certain portion of the population might see this as a covert means of projecting our influence upon the base. Unfortunately, this also means that the colonists will have total control over the base's defence systems, and it may lead to unfortunate consequences for the planet's major life forms and quite possibly, even ourselves. As you said earlier, Captain... Our hands are tied here."

Grinning, JUNO leaned forward conspiratorially. "I have an idea."

A few hours later, I commenced construction of DSV *Exodus*, the latest addition to our fleet. The construction rig is a re-engineered version of the VAM gantry used to create the first beacon ship, *Bifrost* and the launch vehicles for the *Argus* satellite array. The sub-bay's broad apron provided more than enough room for this build, although I had to modify the head of the sub pen with a Terraformer to create a boat ramp. This would also work as part of a rapid launch system for the *Makos*, although that was a job best left for a less hectic time.

All design parameters are checked and A-Okay. Construction gantry is hot. *Throw the switch, Igor!*

By The Power of Greyskull, it is *ugly!* Forty metres long, fifteen metres wide and six metres high. Suddenly, I felt an irresistible urge to don a trucker's cap and dial up some Johnny Cash tunes. Aesthetics aren't a high priority here, although it would certainly do the job it was made for. Most importantly, *Exodus* would fit into the colony's main airlock. Sideways. But only just. That particular design limitation was already sorted by using omni-directional roller wheels and gravity-lifters. Precision manoeuvring wasn't a huge problem. Unfortunately, the Torgaljin base's airlock size

constraints precluded installing a *Cyclops* power plant, so I had to make do with six vectored-thrust *Seamoth* pumpjets instead. Even with all that raw, unbridled power at its command, the best rate DSV *Exodus* can make is a blistering 20 knots. Preposterous! Mankind was never meant to attain such speed. Not to worry. We'll have DIGBY swim in front of us with a red flag.

Its interior fittings were only slightly less visually challenging. No exterior viewports at all. At extreme depth, any hull penetration is a dangerous liability. Even the pilot's view is a video feed from an array of externally mounted cameras. In the interests of passenger comfort, I placed a number of monitors in the seating area to enable the colonists to see their surroundings. Of course, this external view would be carefully controlled under *certain circumstances*, although I probably wouldn't go as far as switching the scenery to comforting images of dolphins, puppies and kittens if the proverbial did hit the fan. I'm guessing that the sound of six heavy repulsion cannon turrets and an electrical defence field lighting off might drop a few major hints regarding our situation.

CHAPTER FOUR

Ten minutes into *Exodus*' first certification dive, I received a message from JUNO. The colonists had sent their list of additional base requirements and the cargo manifest, so we could finally continue work at *Kaori-san no-shima* without any further delays. I was faintly surprised to note that the colonists' additional facility requests were exceedingly modest, although this was a clear reflection of their admirable self-reliance. However, we were already planning to deliver two fully equipped medical bays, each with accommodation for an additional ten beds, along with purpose built facilities for childcare, education and training. Since we still had plenty of room to spare, I added a couple of large multipurpose rooms, a research facility, a workshop and an entertainment lounge.

Polyakov's input was glaringly obvious. The security control facility formed the colony's central hub. His *de facto* command centre dominated the entire complex, even though it was effectively isolated from the base by a number of reinforced bulkheads and airlocks. What disturbed me most was the fact that this facility also included its own moon pool and a Cyclops docking collar.

Quite the cosy little nest you're planning to set up there, Gospodin.

I briefly considered telling him to go piss up a rope, although this design feature might work to our advantage, particularly if an awkward situation were to develop. We'll even throw in a nice mess deck and separate living quarters for his team. Let's see how long their cohesion as a unit can withstand such Spartan living arrangements. Shiny. We'll give the rats their nest.

While we were apparently allowing Polyakov and his chums free rein to play Mall Cops, the base's actual defence system was a considerably more subtle affair. The defence turrets will contain a pair of heavy repulsion cannons and a torpedo launcher, and are spaced at regular intervals around the colony's perimeter. The firing arcs of each turret overlap by a generous factor, permitting a single manned turret to take control of two adjacent turrets to provide concentrated fire. Gunners can also engage full computer control if necessary, accessing a clone version of Torgaljin's ALECTO defence AI. It's familiar firmware to the colonists, and just bright enough to get on with the task at hand. This would be an acceptable compromise that the colonists could happily live with. However, JUNO played a significant role in resurrecting ALECTO. Consequently, he's now considerably smarter than he appears to be.

ALECTO cannot target Warpers or other important wildlife unless they are actively attacking the base. ALECTO will not target any of my crew or their vehicles. If Polyakov or his deputies attempt to over-ride ALECTO's safety interlocks, all turrets and the entire security control complex will instantly go into immediate lockdown. Anesthazine gas will flood the turrets and control centre. All that remains is to drag their sorry arses to the brig, then let the colony decide what to do with these jokers once and for all. In the very worst-case scenario, say if Polyakov and Co. start raising hell and bunker up in the security centre, the whole facility can be jettisoned in one piece without affecting the colony's structural integrity. After that, it's a simple matter of letting them stew on the seafloor until they see the light of reason once more.

There will be surveillance cameras. Count on it. Clunky and highly obvious cameras placed at certain key locations such as airlocks, public spaces and critical base facilities, installed purely to appease Polyakov's dutiful need to keep a close eye on his fellow colonists. We will be able to hack into these devices remotely and insert precisely whatever we want Polyakov to see and hear, should the need to do so ever arise. The colonists' wrist PDAs already provide us with personnel tracking and life signs data, so it's no great feat to listen in on any unwelcome social interactions that may occur between Polyakov and the other colonists. Who watches the Watchmen? We do.

Eight days later, the new base is structurally complete and nearly ready for commissioning. We have already sent word to the colonists, basically letting them know we'd be coming to collect them in two day's time. I am currently engaged in testing the automatic collision shielding fitted to every viewport in the station. Rather than devise a highly sophisticated computer simulation program, I figured that the most effective practical testing method was to ram *Ulysses* into each segment of the station at 15 knots at the end of a 50 metre run-up. This might seem like a remarkably brutal approach, although I got some hard data from an array of stress transducers mounted on the dry side of the walls. Though apparently crude, this methodology is perfectly sound, in that it satisfied all standard analytical criteria: Scientific rigour, consistently reproducible results, meaningful data and extremely loud impact noises.

Man, I love being an engineer.

After completing the breach test some six hours later, I swam out to inspect the striker plate attached to *Ulysses*' bow. I was pleased to see that the sub had survived being rammed repeatedly into the base, although the metre-thick silicone padded rostrum on its bow no longer bore any resemblance to a Reaper's head. Aramid reinforcement fibre had sprouted from the silicone head-form as it deteriorated, creating a sort of lion's mane on the replica. Not that it mattered of course, since the striker had survived long enough to perform its function perfectly. No actual damage inflicted on the base, and no apparent damage to *Ulysses*. Just to be on the safe side, I scanned *Ulysses* from stem to stern to search for micro-fractures. It simply wouldn't do to have the old bus crumble like a fortune cookie during the next deep dive.

As I entered the base, the PA system came online. Chunky, sleazy-sounding R&B guitar licks. Not exactly what I might have selected as a broadcast test track, but it was still pretty good for a pre-2000 oldie. It wasn't one of the tracks from my collection, so I didn't immediately recognise it. I grooved down the corridor, gradually getting into it... Right up to the point where the vocals started.

The crew were pottering about in the bridge when I stumped in, all trying to look vaguely innocent.

"Very funny, JUNO. *'I Hear You Knocking.'* Ha-ha. Bloody hilarious." I grumped, only half-seriously.

"I couldn't decide between the Fats Domino or Dave Edmunds version. Blame IANTO. It was he who suggested playing the 1972 version, Captain." JUNO said brightly, pointing at him.

"Tattle-tale." I chided. "Anyway, I think we can wrap things up for today, troops. What's still left on our agenda that can be done tomorrow? According to my chrono, it's almost half-past pub time."

"Only some minor systems integration tasks and habitability adjustments. Well, it's rather more like interior decorating, actually. Definitely nothing that can't wait until tomorrow, Sir." DIBGY said.

"By the by, how's our old friend ALECTO settling into his new surroundings, JUNO?" I asked casually.

"Extremely well, Sir. All user nodes and peripheral devices are fully operational and *He* is in standby mode, awaiting orders." JUNO said, winking theatrically.

Later that evening, I found myself thinking a bit too much about something I'd prefer not thinking about at all. Although it was worthwhile to install protective shutters and additional reinforcement panels to the new base, there is absolutely nothing I could do to protect the colony from a Warper attack. Even though Warpners are nominally still our friends, the actual relationship with them might be described as tenuous at best, remarkably fragile at its worst. Deep down, I believe that there are valid reasons to exercise caution in any future interaction with Warpners. If things went sour between humans and Warpners for any reason, it would only take two or three of them to wipe out an entire colony. Unless we caught the actual aggressors red-handed, any attempt at retaliation would inevitably lead to a short, lop-sided and incredibly nasty planetary war. Naturally, I am rather reluctant to share my thoughts on this subject with the crew, at least for the time being.

Instead of kicking back and relaxing like the rest of the crew, I spent most of the night staring at my half-finished tumbler of whisky. My heart simply isn't in tonight's bevvie session, to tell the truth. There were enough doubts and misgivings currently dancing around in my head to fuel an entire year's worth of *fun-filled* evenings such as this one.

Although I keep telling myself I've done the right thing by the colonists in bringing them to the surface, I wasn't entirely certain that it was a sensible idea in the first place. To be honest, the colonists were living in comparative safety back at the Lava Castle. Their base was an actual fortress in every sense of the word. In fact, their only real adversaries were sheer boredom and each other. Then *Selkirk's Avenging Angels* descend into the abyss, bearing tawdry gifts of retrospective compassion, belated apologies, expired sticking-plasters and high-sucrose snack foods hastily re-packaged as 'Hope'. Bravo. And don't forget, you also picked up a fresh Nemesis in the process, Jimmy. Remember how easy that was?

Tomar and Polyakov may be cut from a similar cloth, and You played the role of tailor admirably in both cases. That's not much to be proud of, incidentally. Unless you want to live with another re-telling of De Ruyter's sad tale on your conscience, you might want to consider potential consequences of your actions other than those that spring immediately to mind. You've got an entire lifetime of experience to draw from here, and you're well on your way into a second. Better yet, stop using that computer you're inhabiting like a bloody pocket calculator. Start THINKING with it!

I sighed, more out of ingrained habit than anything else. I suppose that I'm being far more self-critical than is absolutely necessary. Even so, these personal gripe-sessions served a legitimate purpose other than pointless *mea culpa* breast-beating purely for the show of it. Now that I am virtually immortal, at least as long as there are new android bodies to occupy, I still need to connect with my emotions in order to retain a human perspective on events around me. It is all too easy to slip into some sort of computer-augmented arrogance and completely lose sight of my original human nature in the process. I'm constantly aware of this. Basically, I need to remind myself that I am still human in spite of all the hardware. However, I can't afford the luxury of making stupid mistakes and hiding under the skirts of the 'only human' excuse any longer. I can only become more than the Alexander Selkirk I used to be; not something better than the human race itself.

Ah, well... That's more than enough cyber-existentialist crap for tonight. I downed what remained of my whisky in one gulp, then headed back to my quarters.

"DSV *Exodus* to Torgaljin Base. We are on final approach. Requesting docking clearance, over."

"Transmission received, *Exodus*. Welcome back, *Gospodin* Selkirk. You are clear to proceed."

Exodus moved forward slowly, entering the base's access tunnel. Its escort vessels *Taranis* and *Red Dragon* remained outside until *Exodus* had entered the main airlock, then they were clear to enter the sub pen and commence loading any cargo that wouldn't fit into the transport sub. Naturally, we have brought a pair of *Ripleys* along to take care of any heavy lifting. If the colonists already have everything they need packed and ready to go, this move should be a fairly straightforward affair.

As requested prior to our arrival, the sub bay was completely empty of personnel. It would be tricky enough fitting *Exodus* into the main airlock without having a horde of random Squishies darting about underfoot. Getting her out of the water posed no problem at all, since the sub-pen's launch elevator was constructed to handle submersibles up to the size of a *Cyclops*. It is simply a matter of driving onto the lift platform, hoisting *Exodus* clear of the water and driving onto the sub-bay's apron. There wasn't a huge amount of clearance in the airlock in any dimension except height, so it required some skilful pre-positioning to get *Exodus* lined up for its approach.

The airlock cycled quickly, allowing the base's inner door to open. Since there was no need to muck about with gradual depressurisation, *Exodus* was able to clear the lock in thirty seconds. With one smooth sideways translation and a deft ninety-degree turn, we were lined up nicely to enter the central atrium. There was barely enough room in the central corridor for a person to pass either side of the transporter, although it would be a foolhardy stunt for anyone to get too close to this juggernaut while it was still moving. Up ahead, I could see some colonists beginning to draw back uncertainly, and I didn't blame them one bit. Even though *Exodus* was painted in friendly high-visibility colours, its size and disturbingly tank-like appearance would still put the wind up anyone watching its approach.

I activated the sub's external PA system.

"Your attention, please. This vehicle has not yet completed its final approach manoeuvres. We will require a cleared space in the atrium to rotate into position and permit deployment of the loading ramp. Please signal when all personnel are completely clear of this area. Thank you."

Exodus moved forward into the centre of the atrium, then pivoted to face the opposite direction. Judging by the awed expressions on the colonists' faces, they clearly weren't expecting a vehicle of this size. I shut down the main drive and activated the transport's stern door mechanism. Hydraulics whined softly, driving the massive outer clamshell hatch panels slowly apart. A green light winked on above the door control pane, signalling that both outer pressure doors were now fully open. The loading ramp extended smoothly from its housing, settling onto the ground with a gentle thump. A few seconds later, both inner bulkhead doors retracted automatically, allowing JUNO and I to stroll down the ramp like movie stars, straight into a jostling press of excited colonists.

At the foot of the ramp, I smiled broadly and bowed with a theatrical flourish. After such a dramatic entrance, I couldn't resist taking my only chance to showboat a wee bit in front of an appreciative audience. *After all, it's taken two whole lifetimes to get to this point, so why the Hell not?*

"*Nǐ hǎo péngyǒu... Welcome aboard *The Magic Bus*!*"

As anticipated, it took less than half an hour to get everyone aboard *Exodus*. While JUNO prepped the sub for departure, I stepped out of the cockpit to brief the colonists. Although it might have been tempting to perform a mock airline safety demo while wearing a 20th. Century cabin attendant's uniform, I had a strong suspicion that it wouldn't be well received...

"In the highly unlikely event of a hull integrity failure, this submarine will instantly implode. Unfortunately, nobody will survive this incident. Terribly sorry about that. Are there any questions?"

It's probably best that I don't use the morbid humour approach this time around. There's 64 folks aboard, and I dare say that some of them might be nursing a variety of psychological issues. Not a good idea to begin poking at their respective neuroses to see which one flips out first.

As I entered the passenger compartment, the low murmur of conversation inside gradually died down. A minor sea of expectant faces turned up to greet me.

"Good morning, ladies and gentlemen. Welcome aboard. We'll be getting underway in approximately ten minutes. Currently, we are waiting for the last of the heavy cargo to be loaded into our escort vessels, *Taranis* and *Red Dragon*. Once they have cleared the docking area, we'll be on our way. Our transit time to the island of *Kaori-san no-shima* will be 35 minutes, and we respectfully request that you remain seated for the duration of this journey. Incidentally, there are two hygiene modules located in the aft compartment for your convenience." I grinned. "So, if you didn't *go* before you left, there's no need to hang on. Please relax and enjoy the ride. *Spasiba*."

I returned to the cockpit and sat down at the console. Time for a bit of soothing music, methinks.

Vivaldi for starters. Something light and cheerful. Although it was strangely appropriate to this particular occasion, Basil Poledouris' *Hymn to Red October* might have been a bit too much for some.

"Captain, *Taranis* and *Red Dragon* have cleared the launch tunnel. Stern doors are sealed and locked. Propulsion systems are enabled. *Exodus* stands ready in all respects, Sir." JUNO said crisply.

"All right. Let's take these folks home."

Exodus trundled slowly forward, heading down the corridor towards the airlock. The massive inner doors slid open obediently under JUNO's command as we approached.

"Commencing alignment for airlock entry. Please remain seated." I said.

Once we were safely inside, JUNO sealed the airlock and activated the pressurisation cycle. I was watching the passengers' reactions on a monitor, and their expressions of alarm were enough of a hint to reduce the chamber's thunderous airflow to a more tolerable rate. Any possibility of this procedure scaring our passengers hadn't occurred to me on our way in. After all, we knew what to expect. Rather sheepishly, I keyed the intercom again to reassure the passengers.

"I sincerely apologise for the unexpected noise levels, ladies and gentlemen. Please bear with us. The airlock pressurisation cycle is almost complete. We shall be entering the water very shortly."

It was easy to tell which colonists were accustomed to working underwater prior to our arrival. *Exodus* descended slowly on the freight elevator, barely making a ripple as it entered the water. The passenger bay monitors displayed a clear view of the sub pen, rippling and distorting as the water inexorably closed over our hull. Many heads were bowed in silent prayer, some faces scanned the walls almost frantically, searching for the first signs of water trickling in from some unseen breach. The Old Hands merely sat watching the monitors with an air of detached disinterest. Occasionally, one might lean over and whisper a few comforting words to those in distress nearby. There was absolutely no point in telling those passengers that their fears were totally unfounded, and that any hull breach at all would unleash a deadly high-pressure jet of water capable of cutting a man in two. Some things are best left unsaid.

"Adjusting trim. Graviton repulsors at two per cent. Main drives are green across the board, Sir."

"Thanks, JUNO. All ahead one-third."

Strictly speaking, JUNO or I could have piloted *Exodus* without touching a single control. This whole pilot/co-pilot thing was mainly done to convince the colonists that they were in steady hands. From what IANTO has told me, the ingrained Torgaljin distrust of AI constructs has been diluted by the passage of time, although it is still present as a cultural undercurrent in this society. If we appeared to be too inhuman in their eyes, it could do irreparable damage to the relationship that we are trying to foster.

During our transit across the inactive lava zone, I left the keel cameras trained dead ahead. Something told me that most of our passengers wouldn't appreciate gazing into open pits of glowing magma. *Taranis* and *Red Dragon* had already swept our path clear of Lava Lizards, thereby reducing chances of unwelcome jump-scaries setting off an increasingly jittery party. As we approached the ILZ corridor, our escort forged ahead to make certain that the way was clear. Although the corridor wasn't particularly confined for most of its length, it was still a nasty place for an ambush.

We cleared the ILZ corridor without incident, and began rising slowly through the Blood Kelp biome. Our escort kept the resident Amp Eels at a respectful distance, occasionally opening fire on any that tried to close in on *Exodus*. Our aft repulsion turrets were kept fairly busy during this time, although

there wasn't any appreciable danger unless one got close enough to chew on our thrusters. All systems onboard *Exodus* are EMP-hardened to prevent them from being fried, but there's only so much you can do to armour any external components. That's why we have defence turrets.

Most of the passengers had calmed down appreciably by the time we entered the Grand Reef biome. As I walked among them to make sure that they were okay, I noticed that a few studious types were using their PDAs to access detailed info on Amp Eels. More than one face lost its colour when they heard what our database had to say about this species. Naturally, it was only a matter of time before someone skipped ahead to consult the entry concerning Reaper Leviathans. All things considered, this drastic change of scenery might be a highly disturbing experience for some of these people. Still, there's no sense in trying to shield any of them from the reality of life on *Manannán*. Sooner or later, its worst nightmares will pay each one of them a personal visit.

JUNO sub-vocalised, her voice sounding softly in my head.

"Captain. We have company. You might want to turn off the passenger bay monitors for this one."

I hastily excused myself from the passengers I'd been talking to and returned to the cockpit.

"Okay. What have you got?"

"Multiple life signs. No acoustic profile developing as yet. I'm currently picking them up as density changes in the water. Whatever they are, there's an uncomfortably large number of these creatures... And their movement pattern indicates that they're attempting to surround us."

Navigation sonar showed our predicament all too clearly. We were currently passing through a deep canyon in the Grand Reef biome, in an area containing a chaotic maze of natural archways. This zone is effectively a tunnel passing through a massive cave system 650 metres below sea level, and there was nothing above us but solid rock for at least three kilometres. Although there was enough sea room in the cavern, the area was filled with potential ambush points. Arches within arches.

"DIGBY, fall inline astern of us and cover our rear arc. No fuss. Slowly does it."

"Aye, Captain." DIGBY replied briskly.

Five hundred metres into the maze, I heard a soft *thump* and a skittering of chitin upon the hull. Several others followed, spaced a few seconds apart. After isolating its video feed from general broadcast mode, I panned the sub's forward dorsal camera around to locate the sound's source. Instantly, the monitor was filled with the image of a single, huge eye.

Crabsquids.

The aft dorsal camera revealed that at least five were already on the hull, stalking about and delicately probing the hull for potential weak points. The face of a Crabsquid loomed huge in the monitor. Startled, I flinched at its sudden appearance. Four huge, expressionless eyes revealed absolutely nothing of the true nature of these creatures. There is a definite intelligence at work behind those eyes; albeit one that is entirely alien, calculating, unfathomable and utterly malignant.

Exodus rose slightly to pass over an arch that reared up directly ahead. Unseen, several more Crabsquids detached themselves from the cavern's ceiling and gently landed upon the hull. My view was blocked by the one squatting in front of the aft dorsal camera. If it wasn't for JUNO's warning, I would have been completely unaware of their arrival.

"It's getting too gorram crowded up there. Set EDF to lowest possible effective discharge. I'd rather not give our passengers any cause for concern, at least for the time being. Fire when ready."

"Aye, Sir. Two hundred joules should make them dance quite nicely. Firing."

The sub's electrical defence field flared briefly. Barely noticeable from inside the hull, yet with just enough *oomph* to make our unwelcome hitchers recoil from *Exodus* with commendable speed. As the Crabsquids fell astern, *Taranis* opened fire with its repulsion cannons to drive them away. Five hundred metres ahead, *Red Dragon* suddenly went active. The heavy thud of repulsion cannons firing in full auto mode sounded loud and clear through *Exodus'* hull. *So much for taking a low-key approach to this problem...*

Swivelling around in the command chair, I quickly addressed the passengers.

"Ladies and gentlemen, your attention please. In case you're wondering what's happening outside, we are currently under attack. A large swarm of Crabsquids has gathered in this cavern, apparently hell-bent on doing us some mischief. However, you may rest assured that we have this situation well under control. As some of you may find this distressing, all external video feeds have been temporarily suspended. Please remain calm. Thank you."

There was an agitated buzz of conversation throughout the passenger bay. From somewhere aft, a woman's voice yelled, "Leave the cameras on! We want to watch this!" Other voices raised in a hubbub of assent. *What else can I do? - The People have spoken.*

"You're absolutely certain about that?" I asked sceptically. "Okay. The cameras stay on."

I stood up, cracked my knuckles and grinned wolfishly.

"Splendid. We'll even do this to music. Audio: Jean-Michel Jarre. Track: *Calyпсо One*... Let's dance."

Red Dragon ploughed the field with a burst from its TRIDENT array, scattering a horde of Crabsquids that were massing for a frontal attack. Those that weren't immediately knocked senseless by the sonar pulse scurried up the cavern walls and rushed straight toward *Exodus*. IANTO swung *Red Dragon* about in its own length, heading after them. *Taranis* popped up fifty metres astern of *Exodus*, her bow repulsion cannons hammering into the Crabsquids that were now falling as a slow rain all around us. All six turrets aboard *Exodus* opened fire simultaneously, picking them off as they fell.

Even with JUNO and DIGBY blasting away at a phenomenal rate, a few were able to evade the barrage and managed to land on *Exodus'* upper hull. These Crabsquids knew precisely how to cripple the sub, and promptly proceeded to attack our thruster nacelles. They were reasonably well-armoured, but it wouldn't take long before their boarding party hit something critical. As soon as I heard their spindly legs tick-tacking about on our hull, I dialled the EDF up to 1200 joules and let it

rip. The field discharged with a heavy *whoomp*, sending the attackers flying in all directions. Immediately, an alarm blared. *Exodus* veered sharply to starboard, but I caught her just in time.

"Hell! We've lost the starboard lateral thruster... Looks like one got ingested and it's wrecked the bloody turbines! DIGBY! We need some additional top cover pronto... Bring in the troops!"

Taranis surged forward to take point, opening her belly doors as she roared overhead. All four ExoSuits ejected sequentially and landed gently on the stricken sub, immediately snapping into combat posture and opening fire in all directions. The pair of Ripleys riding aboard *Taranis* detached from their outer hull clamps a few seconds later, powering forward to take up defensive positions on either side of *Exodus*. *Red Dragon* screeched past barely 20 metres beneath our keel, her repulsion cannons pounding away at the Crabsquids milling about on our underside.

Absolute pandemonium reigned aboard *Exodus*. Apart from an occasional shriek of terror, the passenger bay rang with jubilant whoops each time our cannons scored a direct hit. People were literally bouncing in their seats and punching the air with exultation. All set to a boppy Calypso beat.

According to the tactical display, the Crabsquids are well and truly on the run. The way ahead was now mostly clear, although what few remained in our path had already felt the full measure of our displeasure earlier on. A faceful of TRIDENT is enough to knock the fight out of all but the most heavily-armoured opponent, and there wasn't a whole lot of body to our little pals out there. The TRIDENT pulses had been scaled down to 1.5 per cent yield on purpose. Otherwise, we'd be cruising through a haze of bloody chum about now. That would have been a major P.R *faux pas* on our part.

The sheer magnitude of this attack is a real puzzle. As I've said before, Crabsquids are a stropky lot at best, and it doesn't take too much to cheese them off. Stranger still, I saw a grand total of *four* Crabsquids while passing through this same area less than an hour ago, so where in Hell's name did this horde come from? More to the point, what caused them to swarm us without provocation?

I think it might be time to have another wee natter with the Warpers. There's far too much weird stuff happening down here lately, and now I'm not entirely convinced that *The Father of Tides* is playing by the same rules that He expects us to abide by. It's not just a matter of me and the crew anymore. Once these colonists start moving about on their own, I can't be expected to sit on my hands while *Manannán's* sea life treats them like a scot-free *smörgåsbord*. Sooner or later, they're going to be sick of having their characters re-rolled by the Valkyrie Field, and shots *will* be fired. Count on it.

One hundred metres ahead, I can see the first glimmers of daylight at the cavern's mouth. *Taranis* came about and streaked overhead, making one final dust-off run on any stragglers that might still be sneaking up on us. With one thruster already trashed, *Exodus* can only make fifteen knots. If the Crabsquids figure out that another five kamikaze attacks will leave us dead in the water, it's going to make the rest of this trip pretty miserable for all concerned. Getting a tow back to *Kaori-san no-shima* isn't a huge problem. Docking safely once we reach there *is*. At a pinch, I suppose I could call the Ripleys in to lend a hand, but they're not exactly what you'd call precision tools. Fortunately, we still had sufficient control over *Exodus* to dock with relative ease.

I keyed on the comms console. "IANTO, DIGBY... How's it going back there, chaps?"

"Almost done, Captain. The Crabsquids are retreating *en masse* into the lower cavern complex. There's no point in pursuing them any further, since they have ceased exhibiting all outward signs of aggression. To be precise Sir, they are most definitely retreating." IANTO said.

"Confirmed, Sir. What are your orders?" DIGBY added.

"Remain on station until *Exodus* reaches open water. Rejoin formation as soon as you are able."

Open water and full sunlight at last. Our passengers were still whooping and cheering fit to raise the roof. I conjure now's a good time to mellow their mood a little, especially since we're going to have our hands full offloading this mob in about ten minutes' time. "Audio: John Denver. Track: *Calypso*." A fitting piece of music for The Big Reveal. Thankfully, the area surrounding *Kaori-san no-shima* is comparatively benign by *Manannán's* standards, and played the game nicely for a change. *Exodus* rose through shimmering water, crystal clear and benevolent. A Reefback pod greeted our arrival with their mournful hailing calls, and I replied with a long blast on *Exodus'* horn. A few of the passengers froze in alarm, at least until I rotated one of the hull cameras. "Reefbacks. Absolutely nothing to worry about, folks. They're just saying hello." I said cheerfully.

CHAPTER FIVE

"ALECTO, this is DSV *Exodus* requesting docking clearance."

JUNO and I exchanged knowing glances.

"Authentication code accepted. You are clear to proceed, *Exodus*. Approach beacon activated."

There was a collective gasp from the passenger bay. *Exodus* rose slowly to the 40-metre mark, paused momentarily and rotated into final approach alignment. Admittedly, the colonists' first sighting of *Kaori-san no-shima* Base had been finely calculated to impress. After all the trouble we've gone through to get them here, I genuinely wanted the colonists to appreciate what we've done for them so far. I've always taken pride in my work, and from what I was seeing, this ethic has translated well to my companions. To be honest, even I am impressed by what I saw. JUNO, IANTO and DIGBY had transcended bland Alterra functionality and mere engineering during its construction, effectively transforming this base into an accomplished work of art. The base looked as if it had grown organically on the underside of this floating island, yet there was a subtle, pleasing symmetry to its layout.

"Welcome home." I said quietly.

Holographic approach lights guided *Exodus* toward a purpose-built armoured hangar beneath the central habitation complex. We planned to leave the transporter here as an emergency shuttle, in addition to ten evacuation pod bays located at strategic points throughout the complex. If necessary, the colonists could evacuate directly to the surface and bunker down in a central refuge constructed with absolute worst-case scenarios in mind. *The Bastion* is a heavily reinforced artificial cavern, carved deep inside one of the island's larger hills. It contains a compact and fully-functional base, equipped with an underwater perimeter defence system second only to that installed in *The Broch*. If things went badly awry down there, the colonists would be able to shelter safely until me and the crew arrived to sort things out.

Although it seems ridiculously naive to hand a nigh-unbreachable fortress over to people who might turn against us at some stage, we had this exact possibility in mind well before this refuge became a reality. If the problem involves the colonists themselves, its defence system will allow us to enter unhindered, and everyone inside would be incapable of offering any resistance at all. Our latest version of Anesthezine gas is fast acting and highly skin-permeable... *Pleasant dreams.*

Wherever possible, we are content to leave these colonists to their own devices. Even so, there are distinct boundaries that should never be crossed. Before turning them loose, I felt it necessary to hold a safety briefing to spell things out for any potential troublemakers. Naturally, the most appropriate time to hold this briefing would be just before processing them through the Valkyrie Field for the first time.

"Ladies and gentlemen. As you are aware, this planet does not take kindly to our presence. There are creatures here that will kill you without a second thought. Furthermore, this planet is home to a number of highly sentient species endowed with abilities that exceed humanity's reach. If needs be, these creatures will defend themselves far beyond any notion of a simple eye-for-an-eye payback. We are the intruders here. Never forget that. Your lives depend on how you treat these beings."

I paused for a few beats, allowing the gist of this message to sink in.

"We have brokered a peace of sorts with this planet's higher life forms, and as you have already witnessed, that peace is open to personal interpretation among some species. However, it is absolutely vital that you avoid making any deliberate contact with these advanced species, as your intentions or actions may be badly misinterpreted. Many of these higher creatures have demonstrated psionic abilities, so even your most carefully-suppressed thoughts will be laid open to their scrutiny. They are powerful Readers who cannot be mislead by a smiling face concealing a hostile motive. Regardless of the situation, you will be completely vulnerable to their efforts to extract the full truth of the matter from your mind. Trust me, it's not a pleasant experience. Are there any questions?"

The colonists remained thoughtfully silent. I'll give them this, they are a pretty stoic bunch.

"All right, then. JUNO will now conduct a briefing session on the Valkyrie Field. For your own safety, I respectfully insist that you pay particular attention to what she has to say. Over to you, JUNO."

JUNO smiled warmly, stepping forward to address the colonists.

"Thank you, Captain. Good afternoon, ladies and gentlemen. In a few minutes, the base's Valkyrie Field will be activated. The essential function of this device is to restore life and physically repair any personnel who have sustained fatal injuries. For those of you not familiar with this technology, it is best described as a highly specialised combination of replicator and matter transmitter. Recently deceased human remains are automatically recovered and reconstituted according to the most recent physiological, genetic and psychological templates stored in the Field's storage archives. There is a scanning array in this chamber that will be used to obtain your individual physical and mental parameters for the first time, and when you are ready, this system will be activated. However, we acknowledge and fully respect that some of you may be unwilling to participate in this process for personal, religious or ethical reasons. If anyone does not wish to be scanned, please enter the corridor directly ahead and wait in the next habitation module until this process is

complete. Refreshments are available from the auto galley, should you desire them. Are there any questions at this point?"

Not a single colonist budged.

"However, there are definite limitations to this technology. It should *never* be used for trivial purposes. It does not confer immortality. It is not a means of cheating death. It merely postpones death to a more mutually convenient time. Most importantly of all, the Valkyrie Field is entirely fallible. There's an extremely remote possibility that the revival process may fail catastrophically at some stage, due to a quantum uncertainty factor that cannot be entirely removed from the system's core operating principles. Bear this in mind whenever you are engaged in potentially hazardous activities. Even though you may cheat death in this manner once, twice or a thousand times, the odds stacked against you are always narrowing down. Please remember this."

All this time, I kept a careful eye on Polyakov and his Blue Meanies as they hovered on the fringes of the audience. Their feral grins were more than enough warning that they were planning to use the Valkyrie Field for their own purposes somehow. Worse still, they weren't being particularly subtle about it, either. *Looks like we'll need to use that contingency plan after all.*

"Valkyrie Field is online and standing by for activation, Captain." IANTO said.

I nodded in acknowledgment, turning to address the colonists once more.

"We're ready to go, folks. Today's the first day of the rest of your lives... See you on the other side."

The stasis field took effect immediately, immobilising the colonists in various attitudes of surprise. The crew and I are immune to its effects, so I was able to walk up to Polyakov and park myself right in front of his nasty bulldog face. I want to be the first thing he sees when he emerges from stasis, just to let him know that he's still under the microscope.

"Is that wise, Captain? Any further antagonism may inspire Polyakov to take decisive action." JUNO said quietly. "I realise that he and his team do pose a significant threat to the colony's welfare, although innocent people may suffer as a direct result of any precipitate action on his part."

"Fair comment, lass. It's a calculated risk. I want him to make this vendetta as personal as possible, and this seems like a good place to start. If Polyakov focuses his attention entirely on me, it reduces the probability of anyone else getting caught in the crossfire. He'll want to take his first crack at me when there's no-one else around."

The scanning phase commenced. I was standing less than a metre in front of Polyakov, studying his face abstractedly. This man is a walking blight on humanity; a parasite less fit to live than a Bleeder, in point of fact. However, there is nothing we can do to him unless he poses a direct threat to the colonists. Now, he thinks he has an edge against us. I'm guessing that his next move will be to slip quietly under the radar, re-establish his operations and keep a relatively low profile for a while. I want him to know that we're still watching him. This gambit will either result in him backing down completely or spur him into launching a direct attack against us.

We've got Polyakov convinced he's able to sidestep death now. What he doesn't know is that he and his hoolies have just acquired a definite use-by date. They only get three bites at the apple, and that's their bloody lot. If I'm feeling particularly charitable, I might even let them know about their regeneration limit at some point. Then again, it all depends on how they behave towards the other colonists. If these hard-cases slip back into their old ways, there will be a hard reckoning.

This isn't going to be a protracted psychological warfare campaign. If Polyakov and Co. simply succumb to an indolent life of plenty and settle down to being vaguely human again, I'd consider that a highly acceptable outcome. Take away their primary motivation, and their little rat's nest will crumble from within without any further help from Yours Truly.

"Biometric scanning phase completed. All subjects successfully encoded, Sir." IANTO announced.

The stasis field collapsed. Polyakov blinked for a few seconds, attempting to refocus his eyes.

"There we go, *Gospodin* Polyakov. That wasn't so bad after all, was it?" I said cheerfully.

Polyakov shook his head groggily and snarled, "What do you want? Get out of my face, *durak!*"

"You've been such a *good* boy today... You deserve a lollypop." I gushed enthusiastically.

He slapped the *Chupa-Chup* out of my hand and stormed away.

"Okay. Not fond of strawberry."

I retrieved the lollypop from the deck, unwrapped it and popped it into my mouth. *Waste not, want not*. The crew were already involved acquainting the colonists with the base's bridge layout and its systems. I acted as the floater, wandering from group to group fielding various questions that hadn't been dealt with in the briefing. I'd hazard a guess that lollypop may have diminished any aura of authority I was hoping to project, but there's nothing wrong with showing a touch of eccentricity. Frankly, everyone is being far too serious in relation to the actual situation, and I conjured the best way to deal with this was to inject a wee bit of harmless absurdity into the proceedings. After all, this was supposed to be a happy occasion. A better life for everyone is on offer here. Unfortunately, this transition in surroundings must have been particularly hard on some of the younger kids, as I noticed several of them looking particularly overwhelmed and teetering on the brink of tears.

There is an auto-galley in the adjoining hab module. Although we had an official shindig planned for later this evening, it certainly wouldn't hurt to start cheering up those bairns well in advance. Fruit salad and ice cream for the kids, sandwiches, tea and coffee for the adults. Might as well make myself vaguely useful.

Inevitably, I came face to face with Polyakov and his cronies. He roared with coarse laughter as I briskly wheeled the refreshment cart towards the smirking 'security' team. Lollypop and all.

"Ah-hah! You have found your true calling at last, Mister Selkirk! Our intrepid Captain is now *Chaynaya Ledi*, serving us tea and *zakuski* like a good little robot. Maybe you should consider this as your new career, I think. Yes, I will have your *chai*, so you will not be too disappointed."

Rather than rise to the bait, I smiled pleasantly back at him.

"Thank you, Armin Mikhailovitch. It certainly does make a pleasant change from chasing off huge sea monsters, sealing radioactive leaks in a burning starship and outwitting murderous Invigilators, so I might put some serious thought into this decision after all. Hmm... Not a bad idea."

Polyakov's jovial mood disappeared instantly. He leaned forward and glowered warningly.

"You don't scare me anymore, Selkirk. You have given us enough trouble already. When the mood takes me, I will make a strong example of you and your robot friends. Not today. Maybe not tomorrow, but very soon. I promise you this."

"Thanks for the warning, Armin. It's always good to know where one stands." I said casually. "By the way, did you ever find out what was written on your forehead? Remember? Laser... Pew-pew-pew?"

Unconsciously, Polyakov's fingers drifted to the small dark spot still visible upon his brow.

"What?" He gasped.

"Oh, it's very small. Hardly noticeable, unless you use a micro-scanner. I suggest that you use a very large monitor for maximum image clarity. Your crew might also be interested in what I had to say."

It took the entire security team to restrain him as he lunged forward. I nodded graciously in parting and calmly wheeled my tea-trolley on to serve the next group, chuckling softly to myself.

The seeds have been sown.

Once the colonists had been shown the location of their quarters, the atmosphere inside the base became slightly less chaotic. I slipped away from the group and headed down to *Exodus'* hangar. Might as well repair that dud thruster while I still have a few minutes to spare. In any case, I felt an urgent need for some peace and quiet, maybe even dawdle a while longer over this simple task, purely for the brief chance of solitude it offered. There was once a time when I feared I would never see another human being again. Now that I'm practically surrounded by people, my most immediate impulse is to be somewhere where they aren't. This is a curious turn of events, to put it mildly.

I wouldn't say I'm turning into some kind of cyber-snob. However, I suppose I've become a mite too accustomed to having the crew as my sole companions. In retrospect, I wouldn't have had it any other way. We've always worked well together. Things get done with a minimum of fuss. No inflated egos to get in the way, no hidden agendas to sneak around and absolutely zero friction between us. Even aboard *Aurora*, I generally preferred to work alone whenever I could. Not exactly an actual social phobia as such, although it has definitely helped to keep things relatively uncomplicated between me and my colleagues. Now that this business with Polyakov has come to a head, that urge to become a virtual hermit has resurfaced with a vengeance.

Present circumstances won't grant me the luxury of running away from my problems. In all honesty, Polyakov is an overblown buffoon, incapable of posing any credible threat to me and the androids. He's nothing more than a pantomime villain, if the whole truth be known. Even so, he and his mates represent the last vestiges of the Torgaljin era and everything vile that it stood for. It's all too obvious that he wants to become top turd in a similar neo-feudal dung-pile, and it's up to me to thwart him at every turn. Frankly, if I had any chance of getting away with it, Polyakov and his team would be gassed senseless and halfway back to the Lava Castle right now. Problem sorted.

Not entirely certain that the other colonists would be 100 per cent behind this move, though. It has all the feel of an unsanctioned coup about it, and that definitely wouldn't sit well with the others. The only realistic option remaining is to give those scunners enough rope, then let human nature take care of the fine details. If it meant painting a huge fluorescent target on my own back, so be it.

It was blessedly quiet down in the sub hangar. On the whole, *Exodus* had fared reasonably well against the Crabsquids' onslaught. Its hull coating looked a bit tatty in places, gouged and scored by the action of countless needle-sharp legs and talons, although the hull itself was entirely undamaged. I'm fairly certain we would have discovered any actual loss of structural integrity with alarming speed. As expected, the starboard lateral thruster is a ghastly mess. I extended the gangway and stepped onto the upper hull to perform a more thorough investigation of the sub's external components. Several camera mounts and a couple of spotlights appeared to be in fairly dodgy condition, so they would have to go as well.

Unclipping a Builder tool from my belt, I started work on the thruster pod. Within seconds, the propulsion module reverted to its basic elemental components, leaving the liquefied remains of the Crabsquid to slide down the hull like a monstrous grey bogey. This disgusting mass hung briefly on the hull's outer curve, then slowly splattered in chunks onto the water below.

Query: Engage regurgitation mode? NEGATIVE. Command over-ride, Priority Alpha.

I almost missed the sound of soft footsteps approaching. They were too gorram quiet for my liking.

Héloise.

"Hello, Alexander. Your friends said I'd find you down here."

"Hello, Mme. Maida. I trust that you've found your new living arrangements satisfactory?"

Héloise smiled, shaking her head slowly.

"*Pfui*. Why so formal all of a sudden, *Selkirk-san*? Of *course* they're satisfactory... More than anyone here could have possibly hoped for, in fact. Most of us still can't believe this is our new home."

"Well, it is. Free and clear of any hindrance, until the sun grows cold. It's the very least I could do. Couldn't stand the thought of your people trapped down there after seeing the conditions you had to endure. It didn't seem right, especially since I had a direct hand in how things turned out after House Torgaljin fell. If you can't forgive me for that, I can at least partially atone for what I've done."

She reached out, gently resting her hand upon mine.

"The past is dead and gone, Alexander. You did what you thought was necessary at the time. Believe me when I say that not one of us blames you for what happened. You have broken our chains. What our parents did while in those chains should not be on your conscience."

"All right, lass. At least I've done something right this time around, apparently. Hearing you say that means a great deal to me. You have no idea how much." I said gratefully.

Héloise shoved me playfully. "There you go again... You're being way too serious, *boet!* You obviously need another lollypop, or maybe drop a bellyful of *akvavit* and get yourself a decent sway on. There's going to be some thick heads tomorrow, and you'd be a *blerry* fool to miss out on it."

I laughed. "I wasn't planning to. Just needed a few minutes to myself, that's all. It's all a wee bit too much for me to handle at the moment."

Héloise snorted scornfully. "Says the man who's dragged us from Hell to The Promised Land... That was a nice bit of work with the Crabsquids back there, by the way. You did pretty damn good."

"Thanks. Don't forget, I had a lot of help from my mates. Couldn't have done it without them."

Héloise looked at me intently, sizing me up. She frowned thoughtfully for a second, then smiled.

"You're a good man, Selkirk. Anyone else would have left us to rot down there."

"Not my way, dear heart. I know what it's like to be alone." I said quietly.

"You won't be. Not against that pig Polyakov. Take this."

Héloise dropped to one knee and quickly hiked up the right leg of her jumpsuit. There was a short scabbard strapped to her lower leg. I instantly recognised the diamond blade as she withdrew it.

It was mine. A relic from the past.

"Do what needs to be done, *Meneer*. We are all standing behind you."

I took the offered blade and stood there, slowly turning it over under the hangar's spotlights. Its crystalline surface had remained pristine, completely untouched by the passage of time. Any blood it had spilled in the past was long gone, skilfully cleansed from existence.

"This is a symbol of trust, Alexander. We know you are no cold-blooded killer. Besides, I'm certain you have already thought of a more effective method of dealing with Polyakov. This knife is only a message from the committee. We will publicly support any action that you decide to take."

"I understand. It's not a simple matter of killing Polyakov. His grip on the colony has left an indelible imprint. Removing one strong-man simply makes room for another. I'll need to know if he has any sympathisers outside his security team before I can make any move against him."

Héloise shrugged. "He has a few folks still scared enough to act as his informers. Very small fish that might be *molto* relieved to see him gone. They're not a threat to you or us."

"Okay. That makes it so much easier. Bear in mind that killing him isn't an option. With the Valkyrie Field active, I've got no intention of waiting for him to rematerialise in Med Bay, just so I can slash his apple again and again for a goodly chunk of eternity, until he finally reappears turned inside out. Not my idea of a fun time."

She smiled faintly, raising her left eyebrow. "So, what exactly is your idea of a fun time, Captain?"

"Oh, just the usual... You know." I said lamely.

Héloise sniffed. "That's not much of an answer, *boykie*. I expected something far more intriguing."

"I'm a man of fairly simple tastes. Wine, women and song, mostly. Speaking of which, we should think of heading topside sometime soon. I'll need a couple more minutes to finish these repairs, and we'll be on our way."

"Okay. I'll sit here quietly while you work. No more distractions, I promise."

I chuckled softly. "You're still a distraction, Héloise. A thoroughly charming one, I must admit."

She laughed heartily, throwing her shaved head back with delighted abandon. Her single thick braid of waist-length hair moved with serpentine grace, its fluid motions making the braid appear to be a living entity attached her head.

Héloise leaned forward, peering into the water below. Her nose suddenly wrinkled in disgust.

"Eurgh... What is that thing down there?"

"Crabsquid... Or rather, what's left of the one that got careless. Good news is, *Calamari Puree a la Exodus* is off tonight's celebration menu. That reminds me, I'd better flush this bugger away before he rots and stinks up the whole base."

Using my PDA, I activated the hangar's pumps. The last of the water in the sub pen swirled away and *Exodus* slowly settled on the bottom. With a disgusting sucking sound, the Crabsquid's remains disappeared down the pen's drainage gratings and passed into the surrounding ocean without any further ado. One more quick fill and flush, and we were good to head back topside. Party time!

Just before leaving the hangar, I drew my own knife and ceremoniously handed it over to Héloise.

"There's an old Terran custom. When someone gives you a knife or any other implement with an edge, it must be paid for in silver, lest the friendship be severed. Since I'm all out of silver at the moment, I'm afraid I can only give you my blade in return. It's a Mod II Thermoblade; superheated and monomolecular edged, so be extremely careful who you choose to stick with it. Would you consider that a fair trade?"

Héloise smiled darkly, activating the knife. Its blade flared an incandescent white, almost painful to look at directly. She crouched into a low fighting stance, moving slowly and gracefully as the blade swept through the air, her arm weaving hypnotically like a cobra waiting for the precise moment to strike. I honestly didn't know what to expect at this point, and felt my internal DEFCON status unconsciously ramping up with each supple move she made. It was like watching a razor-sharp watch spring slowly unwinding, driving some impossibly precise and deadly mechanism to its ultimate function. Strike and feint, dodge-step and turn about, stepping lightly in time to some silent and sinister melody that only she could hear.

Abruptly, Héloise switched off the blade, uttering a throaty chuckle of delight. "I like this blade!"

"You had me more than a wee bit worried there, lass. Far too businesslike for my comfort, in fact. Where in creation's name did you learn to move like that?"

"My mother. She passed on everything she knew from the moment I could walk. Her Guardian teachings are one of the two reasons I'm still alive. The second reason is that blade of yours."

"I won't ask any awkward questions. You have my solemn word on that." I said gravely.

"Good. I won't answer them anyway. Very well, I accept your gift... Now we are man and wife."

I spluttered in alarm. *Is there a Belter marriage custom tied to a simple exchange of weapons?* Frantically, I searched through my Belter cultural database and found absolutely nothing. Gorram it.

I'm screwed.

Héloise leaned against the doorway, a wry grin on her face. "*Baka ne!* I'm teasing you. Still, it was completely worth it to see the silly expression on your face, my brave Captain. C'mon... Let's go."

"Oh, just one more thing... On its lowest setting, your Thermoblade makes absolutely cracking toast. Softens even the hardest deep-frozen butter in a single pass."

Playfully, Héloise shoved me aside and bolted upstairs. A most intriguing woman... *My kind of crazy.*

Fortunately, preparations were only just starting to get underway. I found JUNO prepping the auto-galleys with Magic Soup, IANTO was keeping the bairns entertained and safely out from under foot, and DIGBY was beavering away with the multimedia systems. The colonists had already laid out the mess-hall's tables in a sweeping 300-degree arc, with all seating placed to afford everyone an unobstructed view of an ominously cleared space in the centre of the room. My deepest, darkest and greatest fear of all was about to rise screeching from the abyss. I am utterly doomed.

There will be dancing tonight. Not my strongest skill.

The party finally petered out shortly before dawn. As parties go, it was a thing of beauty. Folks ate too much, drank too much and got way too emotional, as they usually do. I was mildly surprised to see Polyakov and his Blue Meanies in attendance, conjuring they'd prefer to remain in their own little slice of Paradise out of sheer petulance. But, turn up they did. Life is full of little surprises.

Anyway, when it comes to entertainment, these Belters certainly know how to kick up their heels in a bewildering array of styles. We had an eclectic mix of acts tonight, ranging from Tibetan throat-singing to a good old-fashioned Techno stomp, plus a fairly representative sample of whatever Muses lay between those two extremes. Between performers, DJ DIGBY kept things moving along with his cunning selection of 'phat beats', accompanied by an outrageous holographic lightshow.

Naturally, we were expected to contribute something of our own to the night's festivities. Although we weren't fully prepared for this, we quickly put our heads together and hit the floor with our own power-mix version of '*Lapti Nek*' from the second '*Star Wars*' movie. While the colonists were still wondering what the Hell had just happened, JUNO unleashed her rendition of the '*Diva's Dance*' from *The Fifth Element*. We had to cheat a bit by using our holo-emitters to handle the visual effects, although our performance was apparently well received. Apparently. I think we were a bit unlucky in having been selected as one of the earliest acts on the card. A few more drinks all around might have made the audience slightly more receptive to our antique sci-fi movie shenanigans.

Oh well, that's show business.

What happened *after* the party was infinitely more interesting... At least from my point of view.

After the cleanup, a few of the Belters hung around for coffee and a quiet chat. Héloïse was there. Eventually, eyelids sagged and these remaining diehards gradually trickled from the room. Soon, only the five of us remained. With the last guests now long gone, a vaguely awkward atmosphere descended on our conversation, and the crew must have sensed this. JUNO sub-vocalised.

"With your permission Sir, the crew feels that this would be a most appropriate time for us to return to The Broch. Obviously, Mme. Maida would prefer to have a less... crowded conversation with you."

"That's the impression I'm getting, too. I genuinely appreciate your consideration, JUNO. Please convey my undying gratitude to DIGBY and IANTO as well. Okay. I'll see you all back at the ranch."

"Very good, Sir." JUNO replied.

Our silent exchange had only taken a handful of picoseconds, so there was no noticeable gap in the main conversation. JUNO rose from her chair, followed split-seconds later by IANTO and DIGBY.

"With your permission Sir, we shall return to base and resume our normal daily operations. Are there any additional orders or unscheduled duties that will require our attention today, Captain?"

"Negative, JUNO. Resume normal operations, please. That is all. Crew dismissed."

The crew smartly braced to attention, right-turned and marched out of the mess hall. I stood and walked over to the module's seaward windows to watch their departure, beckoning Héloïse to follow me. The ocean had taken on a glorious golden hue, catching the first rays of the rising sun. Before I knew what was happening, Héloïse wrapped her arms tightly around me, and we kissed.

Sleep was never an option. Not here. Not now.

There is something to be said for watching over someone as they sleep. You will see their true face in this most vulnerable of all human states. Héloïse stirred gently, her handsome features now at peace and entirely devoid of their customary intensity. The late afternoon sun threw a veil of wave-dappled green-tinged golden light over the room, transforming every surface into intriguing abstract works of art. I marvelled at the sight of her, now sleeping softly nestled in the crook of my left arm. With just a few careless words and a smile, this unexpected encounter has become something to be held onto and cherished. It is the Human Condition in its most basic, sublime and irreducible form.

These are uncharted waters for me. I have never forgotten Kaori. My memories of her still remain untouched by time, still fresh and exceedingly painful to recount, even as a passing thought. Conventional wisdom says we must keep moving forward with our lives, never looking back. I have always travelled with an occasional regretful glance back, if only to remind me of where I have been.

Héloïse woke precisely at sunset, stretching and purring luxuriously.

"Good evening, milady." I said, softly tracing the line of her cheek with my fingertips.

She smiled, her eyes still half-closed with sleep. I drew back the covers on my side of the bed and swung my legs over the side. The air in the room was crisp, but not too cold. Héloïse swore at this sudden change in temperature, burrowed quickly under the covers and abruptly popped her head out. She made a rueful face, pouting with mock disappointment.

"Leaving so soon, my Captain?" She said reproachfully. I leaned over and gently kissed her forehead.

"Reluctantly, dear heart, but not quite yet. The very least I can do is get you something to eat. You must be utterly famished. No, don't bother getting up... Now, do you fancy anything in particular?"

Héloïse smiled wickedly.

"Other than *that*. Savoury, sweet, light or heavy?"

She pondered this question for a moment, then nodded decisively.

"Something sweet and light. And coffee... Lots of coffee. With milk and sugar, please."

I dressed quickly and headed for the nearest auto-galley. When I returned, Héloïse had propped herself upright in bed with a mound of pillows, the duvet drawn chastely about her upper body. She eyed the tray hungrily as I entered, grinning expectantly. I set the tray down on a low bench while I deployed the bed's built-in table, adjusting its height and position for her convenience.

"That smells absolutely wonderful!" She cried delightedly. "What have you brought me?"

"*Blinis* and fruit compote, toast and apricot jam. Also, a copious amount of coffee, as requested."

"*Merci beaucoup, garçon*. I believe this will do quite nicely." As she ate, I sat on the end of the bed, made small talk about the night before and sipped my coffee reflectively.

Never expected this to happen again.

Héloïse walked with me as far as the moon pools. *Disco Volante* was already waiting for my arrival, obviously dispatched to spare me the proverbial 2.5 kilometre Swim Of Shame. Before climbing into the *Seamoth's* cockpit, I embraced her, deftly slipping a small device into her jumpsuit's back pocket.

"Encrypted commlink. One of a unique pair. Broadcasts phase-shifted white noise while you're using it. No-one can hear your side of the conversation, even if they're standing next to you. A concealed one conductor mike and earpiece are stored in a compartment on the back. Let me know if anything unusual happens, okay?" I whispered, nuzzling her neck with genuine affection.

No doubt tongues would be wagging throughout the entire colony by now, so it was completely pointless to make any show of feigned innocence. On the whole, Belters were refreshingly liberal in their approach to personal relationships, although I wasn't entirely certain what they would think of ours. Before the situation completely overtook us, I asked Héloïse how she really felt about courting the affections of an android, and she flatly stated that it didn't matter. I'm rather ashamed to admit that I ran her response through voice-stress analysis before taking her word at face value. Still, this is one of life's thorny questions that can't be resolved with a fudged answer.

During my return to *The Broch*, I was able to mull things over on a slightly more rational level. To the casual observer, it might appear that our relationship has started off bass-ackwards. However, this is precisely how Héloïse wanted the scenario to play out. Get all of that awkward biological business squared away first, and then deal with everything else as it comes down the pipe. A warrior's way of thinking, no matter how nicely you dress it up. In my defence, I made an honest attempt at being chivalrous, although she would hear none of my protestations of noble and manly restraint.

Stop laughing. Work with me here, okay?

She even made me analyse her blood alcohol content to prove conclusively that she still had complete control of her faculties. As it transpired, she most definitely did. Yes, indeed.

However, the analytical side of my mind advised exercising a reasonable degree of caution. Although we are both well and truly beyond the soppy school-kid phase by now, I couldn't entirely believe the speed and intensity at which this relationship has developed. After muddling my way through an emotional drought lasting well over a century, even the promise of human affection... Or a reasonable counterfeit thereof, is something worth reaching for with grateful hands. There are bound to be questions I should never ask Héloïse, although I'll have to rely entirely upon my intuition in order to avoid asking them in the first place. On a slightly darker note, there might be a practical limit as to how far I can trust her. If this is an elaborate ruse of Polyakov's to get under my guard...

I've just walked straight into it. Didn't even bother to look.

Screw it. I'll have to take some wild guesses and place my trust in luck, at least for the time being. Not even sure what I'd do if Héloïse is playing me for a fool at Polyakov's behest. My most immediate priority is to get some straight answers from the Warkers concerning this recent spate of Reaper and Crabsquid attacks. Something screwy is definitely happening down here, and I don't think the Warkers are being entirely candid with us on a whole slew of issues. Might even be a good idea to bring Héloïse along as an official representative of the colony.

One way or another, I'm going to get someone to tell me what's really going on.

Somewhere along the line, our trip out to the Talking Wall had turned into a high-speed game of underwater tag. Granted, it took some mighty persuasive words to convince Héloïse to climb into a *Seamoth* for the very first time, although she quickly discovered their entertainment potential. Given a *Seamoth*'s apparent vulnerability and the threatening immensity of the ocean surrounding it, you'd have to be crazy to board one of these tiny vessels without a slight twinge of apprehension, at the very least.

"So, what else can you tell me about these Warkers? I've read through your PDA data, but I need to know precisely what to expect. You mentioned they're powerful Readers, and that worries me some. I have my own share of secrets, and I'd prefer most of them to remain unspoken."

"I appreciate that, although I don't think you'll need to worry about it. They don't appear to be too interested in our personal lives. Warkers prefer to deal with the larger picture, rather than fixating overmuch on its minor details. My advice is simply to relax and make your thoughts as peaceful and open as possible. The most important thing to remember is to speak your mind truthfully."

"Suddenly, I feel completely naked. More naked than I've ever been. This is not a good feeling."

"If it's any consolation, Buddha says we're all bare-arse naked under our clothes... You'll be fine."

There were four Warpners waiting for us at the Talking Wall. In deference to the Warpners, *Disco Volante* and *Artemis* were parked about 50 metres away and we swam in unassisted. Héloïse clutched my hand tightly all the way, far more nervous about being in open water than the tangible threats it contained. Judging by Héloïse's reaction, agoraphobia looked like it could be an issue with the other colonists. This factor was one of many taken into account when I invoked their 30-day surface quarantine. Apart from giving the colonists time to adjust to a richer atmospheric mix, this acclimation period is intended to gradually familiarise them with their new environment. Their new base is equipped with a number of subsea and surface observatories for public use, allowing them to satisfy their curiosity from safe vantage points. By the time we crack the base seals, most of our colonists should be mentally prepared to face the Great Outdoors.

"Warm seas, friends. The Lost Ones thank the Father of Tides. Their shell is whole and strong again."

"We see many sharp spines on Lost One shell. The Lost Ones fear Father of Tides, fear Warpners?"

I projected full-sized holograms of a Reaper and Crabsquid a prudent distance away. The Warpners instantly recoiled in terror, signing 'Long Talon' and 'Shadow Walker' as each creature appeared. Obviously, Warpners also have some unaddressed issues with these guys.

"Long Talon and Shadow Walker swim far from Father of Tides. Their minds swim dark and deep. Long Talon is few but strong, Shadow Walker is many. Shadow Walker mind is deep and hungry."

Another Warper signed, *"These ones will not hear His words. Long Talon and Shadow Walker say they feed on Lost Ones until they gone from This Place. Make all waters flow with Lost One blood."*

Héloïse's expression was grim. She had been receiving a real-time translation of our conversation through her PDA. Every gesture, shape-shift and colour change made here had been dissected and interpreted for her benefit. Finally, she spoke. Her tone was calm, defiant and colder than liquid helium. "Our blades are always drawn. Tell our enemies to show their faces."

From what I can gather, Reaper Leviathans and Crabsquids have broken away from *Father of Tides*. Only Warpners can still be considered His loyal 'subjects', if that's the appropriate term to use. This isn't a straightforward theocracy ruled by *Father of Tides*, with all of *Manannán*'s life forms devoutly obeying the imperatives of a godlike figurehead. Most of the life forms here are essentially low to mid-order animals, and therefore subject to nothing more than the most basic, instinctive drives.

There isn't much point in asking why Reapers and Crabsquids have suddenly set their sights on us. The answer is obvious. Humans pose an immediate threat to them. Humans are prey. These two species are undoubtedly intelligent enough to realise that any arrangement struck between *Father of Tides* and Terrans does not necessarily call for their unquestioning compliance. Bear in mind that His first duty is to look to the survival of the planet's native inhabitants. Our presence here is a momentary aberration, one that can only be tolerated to the point where it interferes with the natural order of things. Most importantly, there is only one *Father of Tides*. If His offspring were to

rise against him in open rebellion, He would not survive. Life might continue here and certainly evolve, albeit at a drastically diminished pace. *Father of Tides* cannot take our side in this conflict.

By the same token, it would be an utterly suicidal move for the colonists to pursue all-out warfare against Reapers and Crabsquids. Even if they are able to annihilate both species, irreparable damage would be inflicted on the planet's ecosystems. Once the full extent of this damage becomes apparent, we might find ourselves pitted against Warpors and Dragon Leviathans.

It was an uphill battle convincing Héloise that this was one fight we could never win. However, she eventually saw the truth of it, much to her annoyance. She saw the Valkyrie Field as our ultimate weapon, sending wave after wave of resurrected fighters against an endless tide of assailants. I gently pointed out that our adversaries had far greater numbers, accelerated evolution and time on their side. Once you're locked into a war of attrition, it only takes a single tactical error to nudge that delicate balance of forces over a catastrophic tipping point. Sooner or later, the enemy will figure out precisely which points to attack to negate any possible advantage we might still have.

Our only clear way out of this mess is to avoid any direct confrontation. Since Crabsquids are a deepwater species, there's not much chance of them mounting an assault on *Kaori-san no shima*. Conceivably, they might slowly decompress their bodies to reach the same depth as the colony, but this is something that we can keep a close eye on. Daily scanner drone sweeps could monitor their movements without putting anyone in harm's way. On the off-chance that they are massing for an attack, a swarm could be dispersed with a vigorous application of TRIDENT pulses. As a last resort, I could send a significant percentage of their population straight to Hell with a full-scale *Cyclops* attack. Genocide is something I'd rather avoid, particularly if the next combatants to enter the field can instantaneously create gaping holes in solid matter.

My immediate concern here is Reapers. A wolf-pack of Reapers would be absolutely catastrophic, particularly if they penetrated the inner defences in a coordinated attack. Once they get in among the hab clusters, there's absolutely nothing we can do to stop them. Even with extra hull reinforcement, that base can only withstand so much punishment before something crucial gives way. I'm not prepared to let events escalate to that point. If more than one Reaper slips past the midpoint defence ring, I'm definitely pulling the plug. Immediate evacuation of *Kaori-san no-shima*.

And then we bring in the entire *Cyclops* fleet. Time to bloody some noses.

Essentially, we are still entirely on our own. That much hasn't changed. To be honest, I wasn't actually expecting any help from *Father of Tides* or the Warpors, although it would have been decent of them to offer a hand. Then again, I can't say as I'd blame them one bit. After all, it's *their* planet.

In practical terms, we can expect Reaper attacks to increase in frequency and intensity. If necessary, the colony can relocate to the surface to avoid any further contact with these creatures. Not sure how this is going to sit with the colonists, though. From where I'm standing, it looks like we're supposed to shrug off these incursions with a smile and keep 'turning the other cheek' if we want to remain in *Father of Tides*' good graces. I can tell you now, that philosophy will get old real fast. Looking at this situation from a wholly impartial viewpoint, it might seem that those colonists may have been better off staying in the Lava Castle.

However, for good or ill, I have already made my command decision. The question of whether or not it was a huge mistake is best left to be raked over by semi-informed folks who weren't here at the time... Like these things usually are. I'm not about to start whining about my good intentions as I attempt to defend my original decision. I admit it. I've screwed up again. I'll bet you're all bitterly disappointed in me right now.

Tough. Deal with it.

If we can protect the colony in its current configuration, no problem. We might have to beef up its detection equipment and defensive systems to match the increased threat level, but that's only addressing less than half of the problem. I'm getting a distinct feeling that we're being gradually squeezed out of The Big Picture here. Doesn't take much imagination to see the day come when we're herded into our final dead end on *Manannán*. As you can imagine, it won't end particularly well for either side. If it all goes sour, you can count on us to make it a memorable last stand.

There's no point in denying it any longer. This planet definitely wants us gone. If it were only a matter of accommodating me and the crew, I'd gladly oblige. We could whip up a workable FTL ship design and build it from scratch within a few months. Naturally, this ship would be pretty light on for certain creature comforts... Such as life support, food, water and personal space. However, rest assured that our audiovisual entertainment system would be the absolute duck's guts.

Unfortunately, that's the basic problem. Our colonists require something more human-friendly and considerably larger, equipped with an efficient FTL drive and self-contained, multiply redundant life support systems. At a guess, only a ship of *Aurora's* size would be sufficient in terms of space and logistic capabilities. Even so, the long voyage home would effectively call for a Generation Ship, unless a workable substitute for the Alcubierre warp drive can be devised. Cryosleep might be a possible option to consider, although the required equipment and support systems will add yet another level of complexity to the ship's overall design. My most stable home-brewed FTL drive design will make 1.05C at maximum acceleration, and even that trifling mark takes five years to reach under a constant full-power burn. One hundred and seventy-five light years (plus or minus a couple of parsecs) is a sod of a long distance, anyway you care to slice it.

For the time being, it's best to play this hand close to my chest. More in-depth research is required. There's no sense in getting anyone's hopes raised, only to see the entire project turn into a fizzle. My credibility is on the line. There's no walking away from this business once it gets underway.

Our return to *Kaori-san no-shima* was uneventful. Although our meeting with the Warpners had not accomplished anything immediately useful, it at least allowed Héloise and I to spend some quality time together. We spent an hour or so cruising around aimlessly, basically taking in the sights and visiting some of the sector's less dangerous locations. We surfaced to watch the sunset, just for the sheer joy of it. Our *Seamoths* were parked only a metre apart, providing some illusion of intimacy in otherwise hazardous surroundings. The Grassy Plateau biome is a nice place to pull over for a chat, provided that you keep one hand hovering over the perimeter defence field's controls.

"So, what do you think of these Warpners, now that you've met them?"

"I see what you mean about their appearance, *Cherie*. Once you get past their strangeness, I think they are quite beautiful to watch. Their movements are so expressive, like the ballet. I would like to learn their speech some day, if you can find the time to teach me. Yes, I would like that very much."

"*A votre service, Madame*." I said suavely, "Consider it done. Your PDA now contains the most current Warper/Terran lexicon, and I shall install holo-emitters in your dive suit at your earliest convenience."

"That would be tonight, I think... Unless you have other plans in mind." She said, smiling faintly.

"Well, we do have to report back to your committee. Also, the crew aren't expecting me to return to our base at any particular time, so I'd say we have the rest of this evening pretty much to ourselves."

"*Très bon*. Then we shall speak like Wappers all night long. I have so very much to tell you."

"Sounds intriguing." I said, grinning. "Time for some cunning linguistics."

Shortly after sunrise, the base's perimeter defence system went active. Héloïse was still only half-dressed when I bolted from her room and sprinted for the bridge. No alarms sounded in the base yet, but the automated warning that I received indicated something big was heading our way.

"*JUNO. Just caught a proximity alert on the island's sensors. Fifteen hundred metres and closing. Estimated time to contact with outer defences, 120 seconds. Scramble all units, deploy in line abreast behind inner defence ring on bearing 225.*"

"*Affirmative, Captain. ETA your position, 180 seconds. Over and out.*"

I must have scared the crap out of the bridge crew, belting in there like a madman.

"Activate the defence grid... Now!" I yelled.

The young sensor tech protested, "There's nothing on the sonar, Captain. Surely it's..."

I shoved the tech aside roughly, dialling out the passive sonar's range to maximum. Sure enough, a large, shapeless trace was moving slowly through the water at extreme range. Boiling with anger, I stabbed my finger at the display. The hapless sonar tech flinched reflexively, as if expecting a hefty whack to the side of his head. "*There's* your target, Laddie. Next time, I want to see that range-gate wound all the way out. Keep it there. You're supposed to be on the lookout for approaching threats, not watching Spadefish fornicate! *Got it?*" The poor little bugger was almost on the verge of tears. Seeing this, I relented immediately. "Damn. Sorry, mate... Let's take a closer look at this beastie."

The object is huge, moving slowly and deliberately towards *Kaori-san no-shima*. Estimated speed, ten knots. Distance, 1200 metres. Still too far out to get a clear acoustic profile on it. The object seems to be constantly changing in aspect, appearing as a ill-defined, boiling mass on the sonar display. Most definitely a biologic contact... But what? This is unlike anything I'd seen before. Much larger than a Reaper Leviathan, and no tell-tale shrieking roars from the hydrophones. Eleven hundred metres and closing. Contact with outer defences in 30 seconds.

I didn't want to chance using the base's active sonar array. Next best thing to ringing a dinner bell.

Four bright blips were closing fast from a bearing of 045 degrees, positively identifying these sonar targets as *Aegis*, *Taranis*, *Red Dragon* and *Ulysses*. It could only be them. Nothing else on *Manannán* can hit a hundred-plus knots. I activated the base's public-address system. Three short, skull-piercing alarm tones sounded, alerting the colonists to an incoming announcement.

"Attention. Attention. Base defence condition is set to Amber. All non-duty personnel are advised to prepare for immediate evacuation. Assemble in the mess deck on Delta Level and await further instructions. Be advised that we are tracking the approach of an unknown life form. Automated defences are enabled and standing ready, awaiting clear confirmation of this creature's intentions. This alert condition is merely a precautionary measure at present. Please remain calm and prepare for a possible evacuation. That is all. Selkirk, out."

Suddenly, the bridge was full of people demanding to know what was going on. Absolute bedlam.

"What's the meaning of this, Selkirk? You've taken command of our base?" someone yelled angrily.

I turned to face my accuser. Nils Olssen, one of the committee members. I held up a placating hand, intended to silence any further angry outbursts. Hopefully, everyone else here would take the hint.

"Only temporarily, *meneer*. Please forgive my apparent presumption. I was Johnny-on-the-spot, so to speak. Received an advance alert from your detection systems just before sonar picked it up. There's also four *Cyclops* subs out there, waiting for whatever it is to make an extremely poor life choice. We're currently attempting to determine if this creature poses any threat to this colony. See for yourself. Sonar, image feed to central display."

I gently tapped the sonar tech's shoulder. The poor chap practically jumped in his seat.

"See if you can get a clearer image of that target, *boet*. Band-pass filters... Those six sliders on the lower left-hand control panel." I added quietly. The tech nodded, working the controls I'd indicated.

The fuzzy image sharpened appreciably. What was once a writhing jumble of shapes resolved into five distinct objects. One huge, elongated creature, surrounded by four slightly smaller but no less impressive organisms. The central figure cruised sedately in a straight line, heading directly for the island. The four smaller creatures appeared to be swimming in a helical defence pattern, obviously centred on the larger organism.

I grinned broadly at the crowd clustered in front of the monitor. Judging by their bewildered expressions, I'd say that less than a handful were able to interpret what was happening on-screen.

"I know exactly who this is. Our landlord's about to spring a snap inspection on the new tenants."

You know you've dropped a clanger when an entire room full of people suddenly falls silent.

That's basically what happened.

"That large creature is the Sea Emperor. To the best of my knowledge, he is the most powerful creature on this planet. Those smaller sonar contacts are most likely to be Sea Dragon leviathans, unless they're something I haven't seen before. Entirely possible, given that evolution has gone into hyperdrive since humans arrived here. Your base defence systems have been specifically

programmed to grant these creatures safe passage. The creatures known as Warpers are also guaranteed safe passage. Unless this base is directly attacked by any of these creatures, your ALECTO artificial intelligence construct will not consider them to be a threat. However, if they do attack, it *will* respond accordingly. Manual weapon controls are also disabled during a peaceful encounter. These measures are non-negotiable; your continued survival depends on it."

Polyakov roared with rage. He rushed forward, sending several colonists sprawling on the deck.

"You've killed us all! Those monsters will be on us in seconds, and we're completely defenceless!"

"Piss off, *malaka*!" I snapped. "There's four *Cyclops* standing guard out there, plus four ExoSuits armed with Gauss cannons. Besides, if anything does go wrong, the entire defence grid will automatically kick in. Get this through your thick skull... Those leviathans are *not* on an attack run!"

"You'd bet our lives on that?" Polyakov sneered, jutting his jaw aggressively.

"I'll go you one better. I'd bet my own life on it." I shoved him aside and sprinted for the main airlock. Just as I was about to open the inner airlock door, Héloïse caught up and grabbed my arm.

"I'm coming with you." Her expression was pure granite, as if daring me to argue with her.

I smiled and caressed her cheek. "Wouldn't have it any other way, love. You can speak for the colony in person. I'll establish a three-way link so you can communicate with your fellow committee members in real-time. Suit up and follow my lead. Everything's going to be fine."

When Héloïse was kitted up and ready to go, the airlock cycled and we swam out together.

All four Cyclops stood waiting silently inside the inner defence ring. I silently signalled the crew as we passed. JUNO, IANTO and DIGBY confirmed that they were ready for action if this meeting were to suddenly stray into unfriendly territory. Héloïse's heart rate rose with increasing apprehension as we swam beyond the relative safety of this area. As we swam, I reached out and took her hand in mine, giving it a gentle squeeze of reassurance. In the blue-green distance beyond, I could see the immense, majestic shapes of leviathans moving slowly towards us.

"Up ahead. Three hundred and fifty metres out. Relax, dear heart. There's nothing to be afraid of. What we're doing is seen as a genuine gesture of respect. He's probably well aware of the subs and defence turrets behind us, but we're completely unarmed, at least to his way of thinking. We'll be standing before Him without our Shells. That's kind of a big deal to them."

Héloïse froze. Ten metres ahead of us, a roughly man-sized patch of water began to swirl and boil.

"Warper." I said quietly.

CHAPTER SIX

The Warper materialised, weaving its forelimbs in a formalised gesture of greeting. Héloïse and I responded with the appropriate motions and colour changes to our holographic camouflage. Once those social niceties had been observed, the Warper addressed us in a more genial manner.

"Warm seas, friends. This One brings words from Father of Tides. He come for see Lost Ones from the Dark Place. Father of Tides see Lost One Shell has many sharp spines. Metal Talons here. Not come for Lost Ones. Father of Tides come for see and talk Lost Ones. Not for break Lost Ones Shell."

Hmm. Seems like our defence measures are worrying *Father of Tides*. 'Metal Talons' - That could only mean our Cyclops fleet. The 'spines' are obviously the colony's defence turrets. I'd better show that we're willing to meet him halfway here, rather than putting on an obvious display of strength solely for the colonists' benefit. Even so, I let them know that the Sea Emperor's intentions are entirely peaceful before standing down the defence system.

"JUNO, withdraw all units. Regroup on the surface 200 metres west of *Kaori-san no-shima*."

"Affirmative, Captain. Fleet is underway to new coordinates, as ordered."

"Metal Talons hear Father of Tides. Lost Ones greet Father of Tides. Swim free, friends." I signed.

A meeting with *Father of Tides* is an awe-inspiring experience. As the five leviathans resumed their stately approach, Héloïse gripped my hand even more tightly. I could only imagine what was happening inside the colony now. Of course, I could tap into its security cameras to take a quick peek later, although I need to stay entirely focused on the conduct of this encounter. You don't get too many chances in a lifetime, even in an extended one, to hobnob with an entity this powerful.

"Warm seas, Father of Tides. Your (presence) in This Place feeds us." We signed respectfully.

The Sea Emperor inclined his ponderous head gently, acknowledging our greeting.

"Warm seas, Lost Ones. This One is here to see. Your Shell is strong. Where do Lost Ones swim?"

"Lost Ones in new Shell for many tides, then swim free. Come above-water and walk free."

His expression shifted slightly, an almost quizzical look forming on his immense face.

"For why? Lost Ones not swim? Above-water break Lost One shell!" He signed incredulously.

"Lost Ones from above-water. Above-water is Lost Ones first Shell. Born in this place." I explained.

"This one see now. Lost Ones walk above-water, not swim. Different. Not like you. You swim free."

"This One walk and swim with Father of Tides. Give his words to Lost Ones."

"You are Father of Lost Ones?" He inquired.

"This One not Father. This One was other Lost One all alone. Sky Shell was broken." I admitted.

"Not alone. You have mate. You show Lost Ones way from Dark Place, make new Great Shell."

*Give words. **You are Father.***" He signed emphatically.

Héloïse looked at me strangely, as if seeing me for the very first time. Assuming that *Father of Tides* was speaking figuratively, I suppose this is a reasonable statement for him to make. When it comes down to brass tacks, I guess we're essentially both in the same business. The only difference is that He has an entire planet to look after, and I have the Lost Ones. If it came down to a question of

scale, the Sea Emperor definitely has the more difficult job. Although I've always intended this arrangement to be strictly hands-off once the colony re-establishes normal operations, I have a distinct feeling that I won't be able to remain entirely uninvolved with its daily affairs. Things have become slightly more complicated now. It's far too early to tell where this relationship with Héloïse is heading, and there will always be some situations in the colony that will require intervention. This is something I'll need to discuss at considerable length with the committee.

We swam slowly toward the base. *Father of Tides* seemed particularly fascinated by the actual structure of the facility; how its foundations and structural layout conformed to the underwater features of *Kaori-san no-shima*. This is a conscious design decision, since the base's total structural mass and its component buoyancy factors had been calculated to maintain a perfect equilibrium with the floating island itself. Too much upthrust concentrated in any one location could destabilize the entire island, so we found it necessary to spread the base over a relatively large area.

Father of Tides swam closer to the base, his forward motion slowing to a careful, considerate crawl. Presently, we found ourselves hovering in front of the main bridge observation port, less than 20 metres from the closest structure. The four Dragon Leviathans hovered nearby, keeping watchful eyes on the ocean around us. A large knot of colonists had gathered in the bridge to witness this encounter. From what I could see, some were gazing out from the viewport in rapt fascination, while others drew back in terror as *Father of Tides* slowly approached.

"*Warm seas, Lost Ones. This One greets you. Your Shell is strong. Not fear This One.*" He gestured.

"Héloïse, does the committee have anything they'd like to say to *Father of Tides*? Now's the time."

She relayed the question, and the committee's reply was surprisingly prompt.

"Over to you, love. You have the floor." I said quietly.

Héloïse swam into position and activated her camouflage field, becoming a Warper once more.

"*Warm seas, Father of Tides. Lost Ones greet you as friends. Lost Ones (will) not swim as our Fathers swim in Dark Place, many tides gone. Not break Shell of This Place, not break Shell of Father of Tides. Give your words, and we swim free (with) Father of Tides.*"

This speech appeared to please the Sea Emperor immensely. He emitted a low rumble of approval.

"*Many tides (from now), Sky Shell come for Lost Ones, take Lost Ones (away) back to first home. Lost Ones make new Sky Shell. Where Father of Tides swim? Break Sky Shell?*" Héloïse signed.

Good question. Basically, Héloïse had asked whether *Father of Tides* would allow a Terran rescue ship to land sometime in the future, or permit the colonists to launch their own rescue vessel. Everything depended on how *Father of Tides* chose to respond to this crucial question.

Everything.

"*Sky Shell swim free. Lost Ones go above-sky first home.*" *Father of Tides* gestured gracefully.

Just what I wanted to hear. *Father of Tides* has given his explicit word that He will not interfere with any rescue attempt. Given that it would be in the planet's best interests to allow us to leave, He

could not have answered otherwise. To put it mildly, this meeting would have lost any semblance of cordiality if he had refused.

Something must have caught the Sea Emperor's attention. We had been swimming slowly alongside the colony for some time now, when He unexpectedly turned into one of the submarine access corridors we'd left clear when designing the base. The only thing of any interest here was one of the base's primary mariculture facilities, although I hadn't specifically planned on taking our official tour in that direction. Still, *Father of Tides* wanted to see what He wanted to see, and I wasn't about to deny Him this opportunity. If anything, it would give Him a better idea of how Terrans are able to survive here.

Naturally, I was entirely mindful of a faint possibility that this visit could be some sort of covert intelligence-gathering operation, albeit one cleverly disguised as a diplomatic affair. That's why I'm being extremely particular about not showing Him such things as weapon systems, power generators and life support systems. I'm not irretrievably stupid, you know.

We halted in front of the Creepvine beds. *Father of Tides* swam closer to examine the minor forest we had transplanted here, his immense face bathed in golden light that radiated from myriad seed clusters floating gently in the current. His face wore an almost thoughtful expression, as if he were attempting to fathom the logic behind this arrangement. I swam over to one of the plants and severed a good-sized bunch of its tough foliage with my diamond blade. Normally, I'd either feed a bundle like this into a bioreactor or process it with a Fabricator to make fibre mesh. However, a practical demonstration of one of its uses would suffice. I picked a strand out the bundle, rolled it briskly between my palms to consolidate its fibres into a rough twist, then repeated this process a few more times. Once I had enough material, I joined each section together to form a short length of fairly serviceable cord. Ably assisted by Héloïse, I demonstrated the difference in strength between a raw Creepvine strand and a basically worked cord, and this seemed to please *Father of Tides* no end. Consider this your first lesson in Technology 101, my good Sir.

Similarly, He displayed considerable interest in the colony's fish farms. The base had one primary multi-level fish farm, in addition to a number of smaller containment modules scattered throughout the complex. This is a precautionary measure to ensure that the colony's food stocks could be maintained if anything went wrong in the main fish farm. Again, I demonstrated the structure's purpose by catching a pair of Spadefish and depositing them in one of its breeding tanks. *Father of Tides* was able to watch the entire process through one of the facility's viewports. Before exiting the holding tank, I caught four mature Spadefish and brought them back out into open water. I released all four in front of *Father of Tides*.

"*Lost Ones eat some, give some back to Father of Tides. More to eat for all in This Place.*" I signed.

Congratulations, *Father of Tides*. You have completed Lesson Number Two: '*How Do I Aquaculture?*'

After one complete circuit of the base, I had shown *Father of Tides* everything vaguely worth seeing. All things considered, He appeared to be intrigued by our technology, drawing comparisons to more familiar objects in order to properly grasp the nature of our artefacts. With His permission, JUNO launched a camera probe and used it to inspect *Father of Tides* and his Dragon Leviathan escorts more closely. The creatures were surprisingly compliant after the function of the 'Eye Fish' had been

adequately explained to them. By way of reciprocation, JUNO held the drone steady so that it could be closely inspected by our guests.

"JUNO, please designate these four subjects as 'Dragon Leviathans', encode individuals as *Běifēng*, *Nánfēng*, *Dōngfēng* and *Xīfēng*. Collective reference ID to be encoded as: 'Four Winds'." I said.

"Affirmative, Sir." JUNO responded.

In return for sitting politely as we took our happy snaps, *Father of Tides* now wanted to see something that I personally felt might be a wee bit too much. I held a hasty discussion with JUNO and Co, then handballed the same question over to the committee. Although there were some minor reservations, the general consensus was that it should be okay to demonstrate a relatively minor example of our advanced technology. After introducing *Father of Tides* to the concepts of basic crafting and farming, it's a natural consequence that he would want to see the tools we use.

"*Make new Shell. Show this one.*" He gestured.

I swam over to one of the island's smaller stalactites, beckoning Him to follow. After checking that my Builder tool had a stable matter transmission link signal, I constructed a group of four foundation plates and placed a basic habitation module upon them. After adding an entrance hatch, I entered the module and started adding interior fixtures, starting off with a couple of viewports so that *Father of Tides* could watch the whole process. After allowing sufficient time for the Sea Emperor to process what had taken place, I commenced dismantling everything I had just built. A few minutes later, absolutely nothing remained of the structure.

"*Shell is gone. Where Shell swim away This Place?*"

Rather than explain that all components had returned to storage bunkers in the base via a matter transmission beam, I simply held up the Builder and signed that it had 'sent all metal back to first home'. Fortunately, this simplistic explanation appeared to satisfy *Father of Tides*' insatiable curiosity, or I'd still be figuring out how to break it down into something he would understand. He even came up with an apt name that described the Builder tool in Warper speech... 'Shell Egg'.

"*Lost Ones leave This Place for first home, take all broken Shell away. This Place swim free (again).*"

From what I could gather from his various expressions, body language and vocalisations, *Father of Tides* appears to be mightily impressed by most of what He has seen today. Not so sure about the Four Winds, though. They're kind of hard to read. Damnably inscrutable, in fact.

"*You feed our minds, Father of Shells. We go now. Warm seas, friends. Swim free.*" He gestured at last. Héloise and I respectfully responded in kind, remaining there until *Father of Tides* and his retinue disappeared into the blue-green haze beyond. I only hope that we have not bootstrapped this planet beyond its current capacity to evolve naturally. Only time will tell.

For one brief, crystalline instant, time itself stood still. This is the defining moment of my life.

"*Father of Shells?*" Héloise snickered, seconds before dissolving into a fit of uncontrollable giggles.

"Thanks for the reality check, lass. " I grumped. "Nice job slashing my Floaties, by the way."

"So, *Father of Tides* considers you his equal now? I wouldn't want you getting a big head, *Chérie*."

I shrugged, laughing it off. "I would've preferred '*Father of Metal*'. That would be brutal. Still, I'm not complaining. It's not every day you get a chance to parlay with a planetary genius and live to tell the tale. This one's definitely going into the family album."

"I am still shaking, see? I cannot believe I have done this!" Héloïse said excitedly. "You were so calm, so *magnifique*! I almost shamed myself when he came close. He is very frightening at first, yet so gentle inside... Just like you. You are my own gigantic sea-beast, and... *I love you so very much*!"

I laughed, not at Héloïse's urgent declaration of love, but at the sheer incongruity of this situation. She told me this suspended halfway between Heaven and Hell, surrounded by an infinitely hostile ocean and immediately following an unbelievable encounter with an alien demigod. If that's not the right time to tell someone that you love them, then you obviously aren't living in the moment.

"I love you too, *mon chère* Héloïse." I said softly.

We emerged from the airlock to the sound of jubilant cheering and wild applause. The colonists thronged around us, forming a gauntlet of outstretched hands eager to congratulate the two of us. Somehow, we managed to work our way into the bridge. Although it was awfully tempting to simply bask in their adulation just a spell longer, there is some serious business to address first. I held up my hand, signalling for silence. Gradually, the general hubbub died down to a reasonable level.

"Thank you. First of all, I'd like to offer my thanks to Mme. Maida and the colony committee for their valuable contributions during this historic meeting. I could not have accomplished this mission without your unwavering support. Secondly, the issue of building your own rescue ship was raised during our conversation with *Father of Tides*. This is an undertaking that I have also given serious thought to recently, although you should understand that this project will require considerable planning, research and a great deal of physical effort before it becomes a reality. Now, consider the next question very carefully. Once we get started, there will be absolutely no turning back. It's an all or nothing proposition that requires total commitment... Do you want to return home?"

Somewhere in the thunderous roar of approval that followed, I distinctly heard someone say 'Yes'.

Most definitely.

Naturally, the entire colony kicked immediately into party mode. Once they feel it's time to let their hair down, there's no stopping them. Héloïse and I deftly cut the other committee members out of the herd, hustling them into one of the base admin rooms for some serious talk. Presently, we were joined by JUNO, IANTO and DIGBY. Now we can begin planning this mammoth project in earnest.

One inescapable fact exists. We will have to build an industrial complex first. I'm not taking about some vile, smoke-belching monstrosity from the early 20th. Century, although there will be a reasonably large fission reactor or two involved somewhere along the line. Deuterium and tritium are absolutely vital prerequisites for fuelling the ship's fusion drives, and these hydrogen isotopes can be extracted from seawater with comparative ease. Without those two particular isotopes, we might as well build a 1:1 scale model of *Aurora* and call it a hotel. Hydrogen sulphide is also required for the deuterium separation process, although this can be extracted from *Manannán*'s

hydrothermal vents. Lithium is absolutely no problem at all. Ultimately, *Skull Island* is the only viable construction site that we can safely use. Our operations will generate a fair bit of heat over an extended period of time, and this could have a negative impact on the surrounding sea life.

Fortunately, *Skull Island* is entirely artificial, and its waters are almost entirely devoid of any significant life forms. It's a little something I put together with a spare weekend and a Terraformer. The island is currently home to the four neutron accelerator silos that were removed from *Aurora*, plus a couple of tonnes of the nastier elements on the Periodic Table locked away and perfectly safe in a purpose-built HAZMAT facility. As a bonus, we can now make good use of everything that's stored there. What we can't use straight off the shelves, we simply feed into a nuclear transmutation furnace and convert it into something far more useful.

As you may know, large starships are typically constructed in an orbital dry dock. Micro-gravity is a huge help when you're trying to fit those jigsaw pieces together. We have the next best thing. An ocean. The highly complex nature of this project precludes the use of standard nano-lathe construction techniques. We can't simply make several large VAM gantries, link them together in software then feed the system a whole bunch of raw materials, cross our fingers and hope that it eventually spits out an *Antares*-class starship. It doesn't work that way, I'm afraid.

This build will have to be done strictly old-school. Lay the keel first, then build up an entire inner structure girder by girder. Install bulkheads, walkways and rooms as you go, adding fittings, pipe-work and power conduits exactly where they are needed. Every component will have to be placed entirely by hand. I admit, it's a construction method more suited to the glory days of Harland & Wolff shipyard in Belfast, but it's the only way we'll get this project off the ground, so to speak. We'll be adding one minor twist to this method. This ship will be built in a submersible dry-dock.

As soon as the vessel's outer hull nears completion, the entire structure will be raised from the seafloor. We'll need to wait a couple of weeks for the hull to drain out, then we can start hosing off any salt residue and reclaim anything useful from this washout such as salt, stranded fish or whatever. Once that's done, we can then start making the inner hull spaces habitable.

More than anything else, we need all the warm bodies that the colony can muster. While it would be possible for me and the crew to complete this project ourselves, there's only so long the colonists might be prepared to sit on *Margaritaville's* sun deck, idly sipping Fluffy Ducks and Mai-Tais. Far better to have every able body pitching in for this one. If nothing else, this activity would prevent *certain* idle hands in the colony turning to rather less than helpful occupations. Fortunately, Belters are well accustomed to earning their keep on (or inside) their home soil. However, I might have to draw the line at using fifteen-year old reactor technicians. Incidentally... NO BLOODY WAY.

Four hours later, we gratefully rejoined the tail end of the celebration. As the festivities started to wind down at last, the committee chair called for silence and proposed a simple toast. "*To Borealis!*"

Suffice it to say, there were some *very* sore heads the following morning. Polyakov's in particular.

About an hour or so after announcing that phase one of the *Borealis Project* would commence the next day, Polyakov reeled unsteadily up to our table, looking very much the worse for wear. Héloïse grimaced disgustedly but wisely resisted speaking her mind, at least on this occasion.

"All hail The Great Ss-selkirk, saviour of Human... manity!" He slurred, raising his beer mug in a mocking salute. Wretchedly drunk or no, there was more than a hint of malice in his expression. "We are lucky to be saved by this fine robot who talks to monsters as old friends. Now we have a *pravda bogatyr* to lead us, not just a handful of idiots and a *shlyukha* with big ambitions."

I leaned forward warningly. "Let it bide, man. Go to your quarters and sleep it off. You're probably about to say something you'll regret later."

He snorted derisively, spraying me with Creepvine beer. At this point, I couldn't care less what else this lout had to say. Rather than make an issue of it, I calmly wiped my face with a napkin and continued the conversation he'd interrupted. Unfortunately, this action entirely failed to defuse the situation. Polyakov seemed to think about it for a second or two, swore loudly and slammed his mug down on the table. He lurched forward unsteadily and thrust his troll's face toward mine.

Before I could act, something whistled through the air above my head. Polyakov roared in agony and staggered backwards, both hands clutching at his face. Thin rivulets of blood dribbled between his fingers, spattering the deck as he blundered about, still howling in pain. Bewildered, I turned to face Héloïse. Her dark smile was perfectly serene. It was a smile of complete satisfaction.

"Bloody hell! *What the photon* just happened?" I cried.

"Me. He insulted me, so I hit him. Yes, I know you were about to defend my honour, although I am quite capable of doing this for myself. Besides, this has been a very long time coming. Don't deny me that one small comfort, *Chérie*."

IANTO and JUNO were already at Polyakov's side and attempting to examine his injuries. Exasperated by his erratic stumbling and a stubborn refusal to stand still, JUNO forcibly restrained him while IANTO peeled away one of his hands to obtain a better look.

"His nose is badly broken, Captain. Soft tissue damage and bone fragmentation effects are consistent with an apparent blunt force impact of 2.5 kilonewtons." IANTO announced. "However, I am still unable to determine the nature of the weapon used by Mme. Maida."

"You were sitting beside me the whole time..." I said incredulously, "What did you hit him with?"

Héloïse chuckled quietly. "This." A length of ornately-plaited hair rose slowly behind her, then arched menacingly above her head like a scorpion's sting. I watched in fascination as its conical bronze tip swayed rhythmically to and fro, as if searching for a target. Suddenly, it lashed out with terrifying speed, smashing Polyakov's discarded beer mug into a glittering spray of pulverised polycarbonate. According to the numbers, Polyakov was lucky to still have a head on his shoulders.

"It's called a *musubime*. A Guardian's Knot. The hair braided around it is my own, but it was my mother's melee weapon of choice. She passed it on to me. Now it is my weapon of choice. I chose."

"Ah. This explains the mysterious cyber-ware I detected during our first meeting." I said mildly. "Not that I'd have mentioned it, of course. I'm not exactly one to cast aspersions on such matters. Even so, I've never seen a weapon like this before. I certainly wouldn't want to be on the receiving end."

Héloise smiled grimly. "Consider yourself lucky, *monsieur*. Armin Mikhailovitch is also blessed with good fortune tonight. For one thing, he is still alive."

Wordlessly, I took her hands in mine and held them. Something about her carefully controlled expression told me everything I needed to know. I've always found it difficult to find the appropriate words to say in similar situations, so I wisely chose to say nothing. I can only guess at the history that exists between Héloise and Polyakov. Even with a top-notch android CPU helpfully putting my scattered thoughts in order, there's no point in running the numbers on that unspoken question.

This was another one of life's little knife-edge moments. One wrong word, one single gesture taken out of context would ruin everything. There is a correct time and place for playing The White Knight, and this definitely wasn't it.

Héloise tugged playfully at my hands, breaking the tension before it could grow more noticeable.

"You are too quiet, my Captain." she said firmly. "Far too serious. We should be dancing. Come."

IANTO and JUNO returned just in time to watch me making a complete fool of myself. I've never been much of a dancer, and the thought of letting the CPU kick in seemed too much like cheating. Naturally, I found myself instantly outclassed by Héloise's spirited version of belly-dancing. After only five minutes of utterly shambolic effort, I stood to one side and clapped in time to the music. DIGBY appears to be enjoying himself immensely, much to the delight of his gorgeous Belter companion. Presently, the other two AIs strode confidently onto the dance floor and shamelessly started to carve it up. Héloise beckoned seductively, calling me back. To rub salt into my wounds, JUNO followed Héloise's lead, activating her holofield to display traditional Middle-Eastern dancing garb.

"Mutinous dogs." I muttered. *Wet blanket mode disengaged.*

After a very late breakfast, I stopped by the medical bay to check on Polyakov. The few hours of daylight that remained were now completely down the tubes, since most of the colonists weren't in the mood for anything else but sleep. Even the indomitable Héloise had refused to budge from her cosy cocoon, mumbling sleepy entreaties and lukewarm threats as I reluctantly dressed and departed.

IANTO has been able to reconstruct Polyakov's shattered nose, although the collateral damage to the surrounding soft tissue was something that would require time to heal more than anything else. Even after extensive sub-dermal regeneration therapy, Polyakov's face was still a grotesque mass of purple and yellow bruises. His eyes are a pair of swollen slits, their lids incapable of opening more than a few millimetres without causing excruciating pain. I stood in the doorway looking at this sorry excuse for a man, trying to see beyond his currently pathetic condition. Not entirely sure what I was looking for, and I wasn't at all certain what I expected to find there. Polyakov didn't strike me as a fellow who had any redeeming qualities, so I felt a bit foolish for even bothering to look. In truth, Polyakov and Tomar were worlds apart. Tomar may have been totally insane at the end of it, although he truly believed in what he was doing. Polyakov is simply a common thug wrapped in the threadbare guise of a peace-keeper. I think it's about time for another *friendly* chat.

Polyakov regained consciousness several hours later. His first reaction was to struggle weakly against the bed's restraint webbing. After a few minutes of grunting and futile straining against the near-unbreakable Kevlar bands, he simply gave up. By my reckoning, an outburst of furious yelling would start any minute now. Rather than let him raise a ruckus for no real reason, I poured out a beaker of water and carefully handed it to him. He flinched in near-panic, almost knocking the beaker out of my guiding hands.

"Who's there? *Chert voz'mi!* I can't see you!" He snarled.

"Just as well. I'm probably the last person you ever wanted to see, *Gospodin.*" I said amiably.

Polyakov's expression soured. "Ah, hell. You've come to finish me off, Robot. I expected no less from you. You hide behind your machines, now you hide behind our women. I am thinking you were no *real* man even when you were alive. You disgust me, Selkirk."

"The feeling's entirely mutual, *bratets.* I must admit, I briefly considered injecting your IV line with an air-filled syringe as you lay there. Would have prevented a whole mess of future problems." I sighed wearily. "To be honest, I'm feeling a bit uncomfortable about the inordinate time I've spent dreaming up novel ways to snap your twig. I guess my humanity simulation subsystems might be acting up again. Still, here we are... What do you reckon, Armin Mikhailovitch? What should I do?"

"You don't have the guts to kill me, Selkirk. Any fool can see that. Your fairy story about this... Valkyrie Field *apparat* might have fooled the others, but not this one. It's just a cheap trick to control the workers, keep us all docile under the fist of our new robot masters, no?"

I tutted reproachfully, slowly shaking my head. "Don't be stupid. It's absolutely nothing to do with your half-arsed grasp of mouldy Marxist-Leninist dogma. You've missed the point entirely, it seems. We don't actually *need* any outside help with the *Borealis Project*. The only reason we've involved the colonists at all is to give them something to keep them occupied, something meaningful to work toward. A common goal. You're making it sound like we're running some kind of forced labour camp. How did you figure that one out? I'm genuinely curious as to how you reached this conclusion."

"A cage with golden bars is still a cage. A well-fed slave is still a slave." He answered sullenly.

I sighed with resignation. "Fine. Keep thinking that, Pally. So what happens when *Borealis* finally makes planetfall on Terra? Should I drive you out at whip's end, then set up a Creepvine plantation in the Caribbean? Work with me here, Armin. You are my only unqualified failure in this devious campaign to win the hearts and minds of your fellow colonists, only made possible by treating them with common decency. What am I doing so bloody poorly that you need to undermine my efforts?"

"You are treating us like cattle, like pets. True Men cannot live this way." Polyakov grunted.

"Is this another Cruel Robot Thing, Armin? Okay. Have it your way." I leaned over him just close enough to whisper. "I'm not even remotely human. In fact, since you brought up the Valkyrie Field, I'll tell you exactly how inhuman I can be beneath this amazingly lifelike polymer skin. Yes, the Valkyrie Field is real. You and your pack of shaved apes have been singled out for special treatment.

If you die, you will indeed be reborn to learn from your mistakes. However, there's a catch... You are limited to only three lives each. You will also regenerate back in the Lava Castle. Take care, now."

A week later, we were ready to begin work in earnest. Roughly a third of the colonists who volunteered for the *Borealis Project* had to be gently turned away for reasons of physical suitability. Our youngest volunteer is 12 years old, the oldest, 85. Many of the rejected volunteers were suffering from serious vitamin deficiency-related conditions. Given time, most of them would respond well to medical treatment and a greatly improved diet, although we were unwilling to expose these people to the harsh environmental conditions they would encounter while working on this project. JUNO and IANTO have been extremely particular about their selection criteria.

I've designed an improved dive suit and SCUBA system to make conditions a wee bit more tolerable for our human helpers. The dive suit is electrically heated and reinforced with a flexible polarised ceramic that has similar properties to chitin, offering superb protection against most of the hostile marine life on *Manannán*, although a Reaper might find its texture slightly more chewy than usual. The suit's armour reacts instantly to any increase in external pressure, solidifying to prevent penetration or crushing injuries, such as might be encountered during a Stalker attack. The suit is also equipped with a personal electrical defence field, powered by the same compact isotopic power source that runs the SCUBA rig's various onboard systems. It's nowhere near as powerful as the *Seamoth* EDF, although there's more than enough juice to give a predator a number of hefty zaps.

The new SCUBA gear is something that I'm particularly proud of. It's an artificial gill/rebreather system that extracts oxygen directly from seawater, using a combination of electrolysis and highly efficient molecular filters. The O₂ is mixed with precisely monitored and adjusted proportions of nitrogen and hydrogen to buffer the breathing mix, preventing oxygen toxicity effects at extreme depths. Its endurance rating is well in excess of eight hours at a depth of 500 metres, and post-dive decompression is significantly reduced. The whole unit is about the size of a hiker's day-pack, and its mass is approximately the same as a single high capacity dive tank. I've tested this rig to 2,500 metres and the tech is absolutely rock-solid, I'm rather pleased to say.

Naturally, we've equipped the colonists with their own *Cyclops* and a fleet of six *Seamoths*. I've given considerable thought to the question of whether they should have ExoSuits as well, ultimately deciding that this would constitute a huge security risk. Even a Gen I ExoSuit can be used as a deadly weapon. If Polyakov ever got his greasy mitts on one, there's no telling what kind of havoc he could wreak. Speaking of which, our resident trouble-maker has finally risen from his enforced repose and is currently sulking in his security centre. The Blue Meanies have been tasked with patrolling the seabed around *Kaori-san no-shima*, so those bruisers are effectively out of play for the time being.

It's said that the Devil finds work for idle hands, although JUNO is a far more efficient HR manager.

Our first day on *Skull Island* was spent enlarging the island and reinforcing its foundations. DIGBY and I were working topside, constructing the island's support facilities, reactor containment building and preparing the proposed site of the deuterium/tritium extraction plant. JUNO and IANTO were working underwater, mainly supervising and assisting in the colonists' terraforming operation, but also keeping a sharp eye out for any wandering wildlife. *Aegis* and *Red Dragon* cruised continuous patrol circuits around the island under their remote control, ready to repel any potentially hostile life forms that approached too closely. By day's end, there was something substantial and tangible to

show for our combined efforts. A crucial first step has been taken without incident. One milestone behind us in the long journey we've commenced. *Project Borealis* is off to a flying start.

We have company. Unwanted company.

The three juvenile Reapers *Moe*, *Larry* and *Curly* have recently set up their bachelor pad 750 metres NNE of *Skull Island*. Until we can get the dry dock built, I've had to assign all four of our *Cyclops* to perimeter patrols. There have been no serious incursions as yet, but I'm fairly certain that all of this human activity has piqued their curiosity. That's all we need. Three young bucks full of pith and vinegar, all out to make a name for themselves. If there's any level of complex communication between Reapers, you can bet your last Credit Daddy Ahab's been sharing his war stories with these guys. Could make life rather *interesting* in these parts.

Suffice it to say, the colonists have heard them kicking up a fuss over yonder, and they're none too pleased about it. They've never actually seen a Reaper in the flesh yet, but those distant roars begin to sound awful close when you've got your back turned toward an open ocean. Having been in similar situations myself, I can't say as I blame them for getting a collective attack of the willies. Rather than place our volunteers under too much stress, I called a halt to construction on the dry dock while we set up automated defence systems. The dry dock would also need some defensive firepower of its own, although that issue can be addressed while we're building its support gantries.

Another significant milestone. The deuterium extractors are up and running. The first production cycle yielded 40 litres of deuterium, supercooled to a cryogenic liquid state and transferred to one of the island's high-pressure storage tanks. Although that initial product discharge seems barely enough to create a decent puddle, slightly more than 2,500,000 litres of seawater had to pass through the extraction processors to produce those 40 litres. Tritium production is even more modest. The conversion process we're using requires ten thousand litres of heavy water to produce 10 kilograms of tritium. These quantities might seem ridiculously trivial, but it all eventually adds up. As we Scots say, '*Many a mickle makes a muckle*.' This is why fusion fuel production has commenced well in advance of construction on *Borealis*. It's a damnably slow process.

I'm certain there's a smug armchair Nobel Laureate out there having a quiet chuckle over our piddling little operation. Sure, we can easily build more reactors and speed up the fuel production, although when dead fish start popping up on the surface because we've jacked up the local water temperature, *Father of Tides* will be sending us a rather pointed 'Please Explain' note. That's something I'd rather avoid. We'll simply content ourselves with running only four reactors and play nicely with the planet for a change.

Although I have the design of *Borealis* completely worked out, there was still one detail that caused me no end of grief. While trawling through the mass of data I'd salvaged from *Aurora* over a century ago, I encountered a fragment of some command-level mission briefing mentioning the construction of a Phase Gate in the *Alphard* system. I can only assume that this was *Aurora*'s original primary mission in this system, and all that under-the-table business with the STARFISH mining platform was merely a sneaky little money-spinner for Alterra and Torgaljin Corp. Unfortunately, all technical data on Phase Gate construction has been corrupted beyond any hope of recovery. Maybe it was just as well, because the technology involved is *waaay* over my former pay grade. As it was, I knew just enough about Phase Gate theory to convince me that this tech was best left to the experts.

Construction's not the problem. Calibration and temporal-spatial alignment of Phase Gates requires considerably more finesse. Definitely *not* a job for a lowly Spanner Monkey like me.

Phase Gates are artificial wormholes connecting two synchronised points in space/time. If you've got a reasonable head on your shoulders, it's entirely possible to build a Phase Gate according to the instructions printed on the box-top. Getting it to work precisely as intended is much harder. For a start, you'll need a rock-solid positional fix on the last Phase Gate you passed through. If you haven't got that fix, don't even bother about making the next gate. I suppose the closest analogy would be the titanium tubes used for piping compressed air down to particularly deep caves. If you remove any one section at random from the pipeline, the system simply ceases to work. The same basic principle applies to Phase Gates. It's a useful feature if you're not intending to pass through a stellar core at any stage in your journey. Rather than have the system take its best guess and attempt to 'bridge the gap' to avoid a missing or disabled gate, it was found to be infinitely safer to drop out of hyperspace, grit one's teeth and take the slow-boat route to reach the next operational Phase Gate.

The last gate that *Aurora* passed through was *Omicron Leonis*, 130.3 light years from *Terra* and roughly 50 light years from *Alphard*, give or take a parsec. This means that *Borealis* still has a long journey ahead of her. I've worked through the numbers, and the best she can manage is 1.05C, barely a gnat's whisker over light-speed after five years of constant acceleration. Then comes forty-plus years of slogging through The Black to reach the gate at *Omicron Leonis*. Fortunately, it's pretty much clear sailing beyond that point. Our next gate is at *Gamma Crucis*, 88.5 light years from *Sol*, then on to *Alpha Geminorum* (Castor), jumping through the gates at *Procyon*, *Sirius* and finally back to *Sol*. Once we're back in the gate system, our subjective travel time can be measured in weeks. Many of these colonists won't live to witness our arrival on *Terra*, although they are content to pass their legacy on to the next generation.

I'm pleased to report that the colony's 'quarantine' period ended today. The atmospheric mix inside the base now precisely matches that of *Manannán*, allowing the colonists to move freely about on its surface without any adverse effects. The crew and I were waiting to greet them as they emerged from the airlock. Some came out almost fearfully at first, while others rushed out like kids to explore the island. We had taken the precaution of evicting most of the island's Crawler population with repulsion cannons, although it wouldn't be too long before they returned. For today at any rate, the island of *Kaori-san no-shima* is a completely safe environment for the colonists to explore.

Naturally, the colonists have been fully briefed on the island's ecosystems and informed of its potential dangers. Their PDAs would helpfully advise them what features to see next, describe any life forms they encountered and generally enhance their experience of being topside for the very first time. In an emergency, PDAs also served as personal communicators and tracking beacons, although absolutely nothing has been left to chance with the colonists' safety in mind. We have a couple of aerial surveillance drones disguised as Skyrays flying top cover, just in case.

What amazed me the most were their varied reactions to this experience. The most poignant moment of all was when Héloïse and I climbed a small hill and saw an elderly couple standing hand in hand, gazing out over the island's lush foliage to the ocean beyond. Their faces were streaked with tears.

"Please excuse us. We didn't mean to intrude." I said hastily, turning to leave.

"Don't go, Captain Selkirk. We'd like to thank you." The man said softly. "For giving us all of this."

"It's your birthright. We were never meant to live our lives shut away from the sun." I said gently.

The woman's eyes brimmed with tears once more. Her partner drew her close, softly stroking her white hair, whispering tender words of comfort as she sobbed quietly against his shoulder. I wasn't sure if she was shedding tears of gratitude or grief, although I was deeply touched by this unexpected outpouring of emotion. This was an entirely human moment, utterly naked and devoid of any pretence. Given my situation, it was easy to forget the small things that make us human. I suspect that certain facets of my personality may have slipped away or diminished imperceptibly over the years, mostly through lack of any truly meaningful human interactions. It's not immediately noticeable to others, although I can distinctly feel vague, blurry voids forming where deeper emotional nuances used to be. A loss of definition; a sort of creeping emotional dementia.

The way I conjure it, Héloïse may have arrived just in the nick of time. Before then, the only emotions I could muster with any real certainty were anger, loneliness and despair. Genuine joy has been a rare commodity since Day One. Having the crew as company has certainly kept me sane, although there was little dynamic range to the experience as a whole. My companions simulated the human emotional spectrum convincingly, but there was always a feeling that it was well... *artificial*. A particularly clever mimicry of stimulus and response, but you could feel there was no real passion to any of it. JUNO would blow your head off for a thoughtless word or action, then be as sweet as honey the very second that you apologised. There was absolutely no follow-through, no brooding silences, no tentative attempts to heal the peace. Pure binary emotion. Good/Bad. Happy/Sad. Even so, I don't regret one second of that gloriously imperfect, desert-island substitute for genuine human friendship. It saved me.

The pair were painfully shy at first, introducing themselves as Kwame and Monifa Enilo. Second-generation Belters, born and raised in the Lava Castle. They had been denied the sun's warmth on their faces for over seventy years, so it was only natural that they were completely overwhelmed by their first taste of life on the surface. I was genuinely shocked to learn that the base observatories were considered an unbearable form of torture by some of the colonists, so enticing was the view they offered. Honestly, I had not even considered this as a possible reaction, so I felt like a bit of a bastard for having tantalised these poor buggers with the sight of something they couldn't reach. Feeling somewhat ashamed of myself, I explained my genuine motive for imposing the 30-day quarantine, in that I felt it would be extremely dangerous to allow the colonists to simply scatter to the four winds immediately after leaving the Lava Castle. By allowing sufficient time to become more accustomed to their new environment, they would (theoretically, at least) be better prepared to deal with its many hazards. After a fashion, this line of reasoning had worked.

To their credit, Kwame and Monifa immediately saw the sense of it. Our encounter with *Father of Tides* only served to underscore how dangerous this planet could be for the unwary. Incidentally, a rather interesting snippet of information surfaced during the course of our conversation. The fact that Héloïse and I were willing to face Him alone and unarmed for the sake of the colony has apparently done our *mana* no end of good in the eyes of the colonists. We're practically regarded as mythological beings, it seems... '*The Dead Man and The Guardian*.' That's the stuff of legends.

We all had a good laugh over that one.

We took our leave of Kwame and Monifa shortly before sunset. It seemed like the most appropriate time to make ourselves scarce. The island was still alive with the sound of delighted human voices, and it took a certain amount of caution on our part to avoid any potentially awkward encounters. For delicacy's sake, let's just say that the open air and exotic surroundings may have exacerbated certain **ahem** amorous propensities among some of the colonists, and we'll leave it at that.

Eventually, Héloise and I found our way back to *Margaritaville*. The place was almost deserted, so I stepped behind the bar and fashioned a pitcher of frosty Lantern Fruit daiquiris. Héloise drew up a stool and sat at the counter, assuming the air of a dejected, world-weary *mademoiselle*. I picked up a dishtowel and draped it over my shoulder, playing along as the sympathetic barkeep.

"Care to talk, *Madame*? Looks like it's going to be a quiet night tonight, and I'm a good listener."

"You are too kind, *M'sieur*. I have not come to drown my sorrows, but to teach them how to swim."

"A lovely lady should have no sorrows. Tell me about them, and I may be able to help."

Héloise arched an eyebrow sceptically and took a dainty sip of her daiquiri. She gasped.

"Oh, *M'sieur*! This is far too strong!" She cried. "Are you trying to get me drunk? For shame!"

"I call it a *Beached Reaper*. White rum, lantern fruit puree, crushed ice, plus a splash of hydrazine and nitrogen tetroxide to give it a wee bite. It's an old family recipe." I grinned.

"Only if Lucrezia Borgia was your *grand-mère*, many, many times removed." Héloise quipped dryly.

Soon, others began to wander into *Margaritaville* in search of liquid refreshment. Since I was already behind the bar, it seemed like a foregone conclusion that I'd be stuck here for the rest of the night. Fortunately, the crew sauntered in shortly after that first mad rush (*what a coincidence!*) and dutifully shooed me away from the taps. From what I could gather, the mood in *Margaritaville* was definitely more reflective than celebratory tonight. Folks seemed content to chat and enjoy a few quiet brews, and most returned to their quarters below without taking on too much of a sway. By 0130, the place was deserted again.

The following morning, I was pleasantly surprised. The colony's *Cyclops 'Esperanza'* was already docked at *Skull Island* when we arrived, and the work crew were halfway through kitting up. According to my calculations, the dry dock will be completed in approximately three days. Allow another couple of days for a complete physical inspection stem to stern, component integration and systems checks, and then we can finally start laying the keel for *Borealis*.

While it would take far less time and effort to make a considerably smaller ship, there were no logical reasons to adopt a bare-bones approach to this project. Materials are in plentiful supply, salvaged from the huge cache of resources intended to construct the immense STARFISH mining rig. We also had a number of intact major components stripped from *Aurora*, many of which were scaled specifically for installation aboard an *Antares*-class starship. To some extent, we were cutting our coat according to the cloth provided. The one factor that ultimately decided the size of the vessel is the anticipated duration of its maiden voyage. We'll need as much habitable space as possible, and sufficient environmental resources to allow for any appreciable increase in the number of colonists we'll be carrying. What happens nine months from today will only be the start of it.

When completed, *Borealis* will have almost the same outward appearance as *Aurora*, although an experienced Spacer's eye would be able to tell them apart instantly. *Borealis* still has four primary drive nacelles at the stern, although she lacks any external Alcubierre warp field hardware, particularly the emitter arrays. The bow section has been modified to accommodate a Bussard hydrogen ram-scoop, although that system won't be operating until *Borealis* is already travelling at a pretty decent clip through interplanetary space. Our flight profile will have to include some complex in-system orbital transfers as well, since *Borealis* will have a relatively limited supply of deuterium and tritium onboard to power its fusion reactors. Even though we're talking about several hundred thousand tonnes of deuterium here, we'll still have to be extremely thrifty as we expend this fuel during our long, slow acceleration to light speed. Once we reach approximately 10 per cent of light speed, our Bussard interstellar ramjet finally comes into play.

Once *Borealis* has finally cleared *Alpha Hydrae*'s outer solar system, the Bussard magnetic scoop can be safely deployed. The scoop is an immensely powerful magnetic field, extending 125 kilometres ahead of *Borealis* with a maximum diameter of 500 kilometres. Its function is to collect interstellar hydrogen atoms while the ship is travelling at any respectable fraction of light speed. When you're dealing with deep-space hydrogen concentrations as low as one atom per cubic metre, the velocity at which they're collected becomes particularly significant. Just like bugs on a windshield.

Most of the collected hydrogen can be used directly as a straight plasma reaction mass, although any deuterium entering the system can be magnetically separated and used to top off our fusion reactor fuel reserves. It's almost (but not quite) the fabled 'Free-Lunch Drive'. The one critical factor in this process is maintaining absolutely perfect magnetic field geometry. As well as acting as a scoop, the field also serves as highly efficient particle shielding. Once the ship reaches any significant fraction of light speed, all of those friendly little hydrogen atoms begin to display a more sinister aspect. Their mass increases with velocity. You can probably guess what happens if the Bussard scoop's magnetic field collapses or even fluctuates while *Borealis* is travelling at light speed.

We've had to be slightly more creative with our choice of atmospheric drive systems. Rather than use conventional fusion drive or chemical propellant systems, I feel that we should depart *Manannán* as politely as possible. Vaporising a cubic kilometre of seawater during launch would be poorly regarded by *Father of Tides*, and I'm fairly certain that it would be a ridiculously short flight. For this entirely sensible reason, *Borealis* will be using its gravity repulsors during launch. I've calculated that we'll need to be 10,000 kilometres beyond the gravity well of *Manannán*'s outer moon *Phryne* before it's time to light up the fusion drive. One planetary diameter from the surface would provide a sufficient safety margin for a full-thrust fusion burn, although there's nothing wrong with making a slow ascent on gravity drive. It uses considerably less onboard fuel, for one thing.

The beauty of using a large hull design is that we can afford to be generous with everything associated with a long-duration mission. Entire decks can be devoted to life support, engineering, stores and accommodation. With redundant systems integral to the core design of *Borealis*, even the back-ups of the back-up systems will have backups. There will be a number of physically isolated hydroponics and mariculture facilities built onboard to prevent a catastrophic loss of our food supplies, should the ship's primary food production systems fail. In the very worst case, the genetic storage banks can be used to produce disease-free specimens to replace affected stocks. Like I said, we can afford to be generous. Forty-odd years without a decent cup of tea is a sod of a long time.

I took one final pass around the completed dry dock, if only to satisfy a completely unjustified suspicion that something in there wasn't quite as it should be. It's an engineer thing. Humour me.

Gawain's inspection scanner reported a structural integrity reading of 100 per cent. I activated the ExoSuit's commlink, connecting me with the dry dock's onboard control room.

"Looks good from my end, troops. How's everything reading on the big board?"

"All systems are fully operational, Captain." DIGBY said confidently. "Functional systems testing program will commence on your mark, Sir."

Sitting on the seafloor at a depth of 75 metres, the dry dock resembles the ribcage of some Leviathan-class cyber beast, picked clean of its metal flesh. Four hundred metres in length at full extension, 220 metres wide and 50 metres high. Four articulated mobile construction arms were stationed along both sides of the structure's longest axis like short ribs, each one equipped with an industrial grade nano-lathe emitter and control cab. These arms are currently retracted, although they would extend to their full height of 200 metres at some stage during this structure's certification test. For stability's sake, the control cabs were built into the dock's two main pontoons.

This was my own modification to the basic dry dock design. With *Manannán's* hurricane season only nine months away, I wouldn't expect anyone to willingly climb into a space dock's version of a nano-lathe control cab; a lonely little airtight pod mounted at the extreme end of a retractable boom arm. Not an ideal place to be in during a Category Five blow. We're getting our first taste of increasingly erratic weather patterns right now, although the *Argus* satellite array will provide ample warning of anything significant brewing in our sector, weather-wise. At the moment, I'm ready to call it a day whenever the wind-speed hits 10 metres per second, that's Force 5 on the old Beaufort Scale. You'd probably call it a 'fresh breeze'. Even so, when you're floating a structure 400 metres long, those charming little whitecaps can still pack a nasty punch. Harmonic resonance. If you're still vaguely interested, look up '*Tacoma Narrows Bridge* collapse' on The Cortex.

That's when it's time to put our toys away. When the weather starts cutting up rough, the dry dock will completely submerge, taking it out of harm's way. According to the fluid dynamics simulations we've ran, the entire rig will be stable once it's fully submerged and locked onto its anchor pylons, even with a mostly-complete *Borealis* hull attached. That's a comforting thought.

"Okay, DIGBY. Bring her up."

"Aye, Captain. Blowing ballast, set for zero point five metres per second ascent." DIGBY responded.

"Keep a close watch on those structural stress readings. If she's going to fail at all, now's the time."

"All readings are still within design tolerances, Sir. Anchor points clear in ten seconds. Rising steadily, all systems are nominal. Five seconds... Anchor pylons are clear. Attention. Attention. Surface breach in forty seconds. Extreme caution is advised within the projected surge zone."

Gawain rose slowly, following the dock as it surfaced. There was bound to be a fair bit of turbulence once this massive structure broke sea level, so I kept my ExoSuit at a highly respectful distance from the rig. Believe me, this was a truly magnificent sight to behold. And it's only the beginning. Now, the *real* work begins.

My ExoSuit's thrusters kicked in as the dry dock's displacement wash rolled overhead. Now that it had fully surfaced, I could approach closer to inspect the operation of its stability control systems. I signalled DIGBY as soon as I was in position to check the outriggers, and all twelve supplementary floatation pontoons swung down smoothly and locked into place. Each of these smaller floats were fitted with a pair of vectored thrust pods, providing the dock with additional roll stability and a modest degree of mobility. Even though it wouldn't break any speed records, it might be necessary to relocate the rig to deeper water as the outer hull of *Borealis* nears completion.

Once the outriggers were fully deployed, DIGBY started moving the construction booms in a pre-determined test pattern that simulated normal working conditions. Some booms extended to their full length and began to nano-lathe large blank test pieces, while others transformed into crane mode and commenced a series of complex cargo hoists and movements intended to place high structural loading on critical points of the dry dock's structure. Somewhat more scientific than having the heaviest crew member jumping up and down on a dodgy-looking gangway to see if it would break, although it essentially fulfilled the same function.

About an hour into the test program, IANTO checked in. He and JUNO were running their regular weekly clinic at *Kaori-san no-shima*, and several of the colonists had presented with a disturbingly similar set of symptoms. Outwardly, it seemed to be some kind of skin disorder, although there were other symptoms that rang some definite alarm bells. All patients complained of dizziness, joint pain, fatigue and nausea. The colony's medical techs initially thought it might be a type of scombroid food poisoning contracted by eating spoiled fish, or possibly fish contaminated with a local variation of a *ciguatera* toxin. Plankton and algae naturally produce this toxin and it concentrates in the flesh and organs of fish that eat these microorganisms, usually with no ill effects. These fish are in turn eaten by larger predatory fish, who accumulate even higher levels of this toxin without suffering any apparent effects. Certain species of fish are more likely to be contaminated with *ciguatera* than others, and thus can be avoided. However, that's how it works back on Terra. There's no direct equivalents of Spanish mackerel, snapper, coral trout, red bass or triggerfish here on *Manannán*, and definitely no toxic dinoflagellate plankton that might serve as a possible source of contamination. Looks like we've got ourselves the makings of a genuine medical mystery here.

I left DIGBY to complete the remainder of the dry dock testing program, assisted by a couple of recon drones. According to the data I'd already gathered, the structure would easily meet and exceed its design specifications, so the final series of tests were little more than a formality. On my way over to the island, I remembered that the colony's crops had been partially destroyed by some kind of blight, just before we entered the Lava Castle for the first time. Although its spread had been halted by some commendably quick action with flamers, we never actually got around to analysing the causative organism. In retrospect, that was an incredibly stupid mistake on my part.

If this disease is anything more than a simple skin disorder or an allergic reaction to some unknown substance, we may have to isolate all affected colonists before doing anything else. However, that also depends on the disease's incubation period, assuming that it's caused by a bacterial, fungal or viral infection. Realistically, it may be too late to implement any quarantine measures. Considering that those people have been in close proximity with each other long before we entered the scene, enforcing a quarantine to contain the spread of disease would be totally pointless. It's already here.

When I arrived at *Kaori-san no-shima*, I proceeded straight to the medical centre at a high rate of knots. No time for observing any social niceties, unfortunately.

"Okay, IANTO. What exactly do we know about this bug?"

"Not very much at this stage, I'm afraid, Sir." IANTO admitted. "So far, I've been able to isolate the infective agent and positively identify it as a virus, although its characteristics are entirely unlike any known exogenic viral form catalogued in my databanks."

"How so? What makes this one any different from other viruses?"

"For one thing, instead of simply hijacking the DNA or RNA of the host organism in order to reproduce itself as rapidly as possible, this virus appears to directly re-write the host's genetic structure, cell by cell. Curiously, there is very little actual reproductive activity among any of the viral specimens I've observed, causing the disease to progress at an incredibly slow rate once the host has been infected. Its primary function appears to be entirely mutagenic rather than reproductive." The lab monitor projected a quantum microscan of a human cell. A single tiny object had been highlighted within the cell's nucleus. Unless you knew precisely what you were looking for, human eyes would miss it entirely.

"It's almost as if this virus is equipped with a stealth function. Incredibly low population density per cell, minimal cellular disruption during its active phase and the disease manifests itself as relatively low-intensity symptoms. Its effects are easily overlooked, or discounted as something minor. This effectively allows it to remain undetected, unless you're actually searching for it." IANTO concluded.

I frowned, trying to remember anything I'd seen or heard that might shed light on the nature of this organism. There's bound to be something significant buried in all the information I've collected over the years, but finding that one crucial piece of data is the tricky part.

This is where the crew have a decided advantage over me. Their minds are wired (quite literally) for a 3D web-like matrix of inquiry when they're dealing with a problem. Holographic thought. Poor old Selkirk is stuck with a mind that follows a vaguely linear 'tree' pattern, only jumping onto different branches when he runs into a dead end. It's a bit like using the old-school 2D flowcharts to map out the initial structure of a computer program. You might say it's a severe intellectual limitation compared to an android's native thought processes, but I've learned to live with it.

So, we have a potential culprit. This virus is apparently able to remain dormant for at least two or more months, although it's a fair bet that it could have been present in the colonists for much longer than that. I'm only guessing at this point, but it's entirely possible that some environmental or physiological change in the colonists acted as a trigger, activating the virus. IANTO explained this mechanism as being similar to physical or mental stress reactivating a dormant case of *herpes zoster* ('shingles') in a human being, usually decades after the patient had been infected with chickenpox.

Well, the colonists have certainly been through some changes recently, although it's going to be a job and a half figuring out what specific conditions this bug requires in order to function. To find that out, we're going to need a viable sample of this beastie in its dormant phase. To the best of my knowledge, there's only one location where we could be certain of finding this viral sample.

The Lava Castle.

After boarding *Ulysses*, I constructed a Level IV biohazard containment facility in its minisub bay. IANTO recommended that we should conduct all experiments aboard the sub in order to maintain some control over the virus once we have secured a 'wild' specimen. With luck, this variant would not have adapted itself to the human genome yet, and we would be able to compare its functions with samples collected from infected colonists. After obtaining baseline data on the viral structure and its infective mechanisms, we would then be able to develop a reactive vaccine, or at least devise a treatment program to counteract its effects. Viruses are devilishly hard to combat, mainly because they inhabit that hazy borderline between living and non-living entities. Conventional antibiotics are totally ineffective against viruses. Antiviral treatments have to be tailored to counter the infective mechanisms and physical properties of a specific viral strain, delivering a precise chemical strike on its active components. Naturally, I defer to IANTO and JUNO's expertise in this particular field.

One thing did strike me as being particularly odd. I've never contracted this infection.

I'll bet a year's salary that Torgaljin Corp are somehow responsible for this. Either they caught this bug off-world and brought it with them, or they've engineered a native viral strain with a view to using it for some nefarious and highly lucrative purpose. Regrettably, certain Mega-Corps have been known to dabble with biological weapons. They're relatively cheap to make once the basic R&D work is complete, easily deployed and require no additional support after they're turned loose. If you're an insane tin-pot dictator wanting to leave an indelible mark on history, bugs and GELFs are ideal weapon systems. However, bio-warfare is not without its attendant hazards. If the bugs don't turn on your own population right from the get-go, your opponent will be extremely annoyed and reply with a commensurately more powerful response. Nothing says 'disinfection' quite as eloquently as glassing an entire country from orbit. Just say 'NO' to Bugs, kids. It's the only way to be sure.

It wasn't particularly helpful that Torgaljin Corp's upper-echelon execs were notoriously sloppy record keepers. I've collected hundreds of PDAs and data downloads during my travels, each one containing tantalising snippets of *possibly* useful information and bugger-all else. If I were still entirely human, it would be an absolute nightmare collating and cross-referencing all that data. Unfortunately, this was one job that none of us ever got around to completing, considering that we are dealing with rather more urgent matters than looking for the equivalent of discarded sticky-notes littering the seafloor. Knowing my luck, there's one PDA out there containing everything that we urgently need to know... Currently making its way through a Reaper's digestive tract.

Still, I had some of the pieces in this puzzle. Might as well shuffle them around to get a vague idea of what we're up against. I still had 20 minutes or so of transit time until *Ulysses* entered the Lava Castle's dock, so I conjured this time would be more profitably spent going over what little information we already had. Frustrating, to say the least.

Sure enough, *Degasi* survivor logs mentioned early symptoms of a viral disease, although there were no further entries indicating how they cured it. Baat Torgaljin obviously managed to find a cure, since he, his father Paal and Marguerit Maida survived long enough to establish a base in the Lava Castle. It's a certainty that another Torgaljin ship arrived here with sufficient colonists to commence large-scale operations. How that ship was able to land unchallenged is a complete mystery, although it may have had something to do with its drive system and approach pattern. *Aurora* was shot down

by the Warpers when its Alcubierre warp field accidentally discharged its accumulated burden of charged particles during a solar flare event. And yet, that Torgaljin colony ship landed safely... How?

CHAPTER SEVEN

The only sound was water dripping from my dive suit. Emergency lighting threw trembling reflections on the ceiling of the cavernous sub bay. I climbed out of the water slowly and carefully, keeping my own noise level as low as possible. Although the Lava Castle base is supposed to be entirely deserted, there was no sense in announcing my presence to all and sundry, particularly if there *is* something in here with me. Sometimes, a wee touch of paranoia can be a useful thing.

As a nod to common sense, I kept the flechette rifle slung on my shoulder. On the off-chance that a colonist or two may have gone into hiding, it would make a mighty poor first impression for me to be prowling around the base with a readied weapon. I ran a deep scan of the surrounding area, then commenced sampling of the sub pen's atmosphere. If the infection originated in the waters outside the base, the colony's only air/water interface seemed like a logical point to begin testing.

Fortunately, the environmental sampling unit performed all of the grunt-work for me. All I had to do was point its probe wand at the surface I wanted sampled, and the backpack processed the targeted material automatically. Tagged, bagged and time-stamped, all in one smooth motion. If I ever decide to ship out again, I might be tempted to take a crack at Life Sciences. If this sampling caper was anything to go by, it's a fairly cushy job. Of course, there's always a high probability of getting jumped by a xeno lurking around the next corner, but it's nothing I haven't already been through.

Rather than use the main airlock, I entered the base via a personnel access hatch. Its pressure equalization cycle is far quieter, for one thing. While the cycle was running, I took another series of samples from various surfaces in the chamber itself, if only to be completely thorough in my search. The inner hatch opened quietly, and I stepped into the central corridor. The only audible sound came from the base's main air-circulation fans, and even then I had to strain to hear it. Although this base is technically moth-balled, its life support systems have been left running as a contingency measure. Left to its own devices, dead air will go stale in fairly short order. Oxygen levels could slowly deplete due to chemical reactions with certain materials in the base, rendering its atmosphere potentially lethal for anyone not wearing an environment suit.

This isn't a huge problem, at least as far as I'm concerned, although any human down to their last few litres of breathing mix would be eternally grateful that there's still a safe atmosphere in here. I linked with a nearby terminal to obtain a status report on the base as a whole, and it looked good. Power consumption currently sitting at 0.05 per cent, life support running at minimal load, all nuclear reactors are in standby mode and the geothermal power grid is nominal. Looks like everything's basically tickety-boo in here.

Moving slowly and methodically, I worked my way through the base, room by room. Mainly personnel accommodation and facilities on this level, so this part of the run was going to be a monotonous grind. Average Joe colonist must have had a grim time here, all things considered. I walked through corridor after corridor of drab cubicles that had been lasered out of the surrounding basalt, along with most of their interior fittings and furniture. I was pleasantly surprised that the bed alcoves had decent mattresses and the stone benches had fabric cushions, although these items

were the only apparent concessions to human comfort. Each room had a single outer door for privacy, its own hygiene module and an entertainment terminal, but that was as soft as it got for those poor sods. I don't think Alterra would dare provide such Spartan digs for its employees.

By the time I reached the base's executive accommodation section, I was ready to reconsider the Life Sciences career change business. I'm definitely over this lark. According to the ESU's readout, I've collected 850 samples of air, moisture and organic debris so far. Preliminary analysis indicates the presence of several thousand known species of bacteria, viruses and fungi, most of them typically found in, on and around human beings. Instead of finding *Manannán's* version of the *Andromeda Strain*, the most virulent organism I've found so far is good old *Staphylococcus aureus*. Golden staph. Still the undefeated champ, in spite of our best efforts.

Adaptability. That's how any living thing manages to survive. It's not about 'survival of the fittest'. All living organisms are 'fit' to survive, but the true test of any organism is its ability to alter its physical form to better suit an unfamiliar or hostile environment. Humanity has taken a more pragmatic route, altering alien environments to accommodate its physical form. As you might expect, this approach hasn't always worked in humanity's favour.

Occasionally, mankind bumps into an alien species with a similar *modus operandi*. That's when it all hits the fan. We have our shiny terraforming equipment, all very clean, scientific and user-friendly. *They* have spore colonies, pulsating gestation cysts and mutation chambers, held together by a slimy sentient biofilm that oozes menacingly all over the landscape. Philosophically speaking, we're both in the same basic business. Terraforming. The only appreciable difference is in the tools we use.

However, if *They* require humans as living hosts, raw genetic material or simply as nutrients for their offspring, we reserve our right to take strenuous exception to their methods. More often than not, *They* aren't remotely interested in what we have to offer as a species. *They* generally want us to stay out of their way. An eternal, bloody struggle for *lebensraum* in a practically infinite Universe. This situation might almost warrant a wry chuckle, if it wasn't so gorram ridiculous. On those mercifully rare occasions when we've run afoul of a hostile alien species, the TSF promptly plants an alarming number of Size 13 boots squarely on a particular problem and starts kicking until it stops twitching. In most cases, this simple yet effective technique has served humanity well.

However, one particular alien race keeps clawing its way back from the brink of extinction, in spite of many vigorous and costly attempts to eradicate them. In many ways, this race would be considered eminently 'fit' for survival, given that they are highly aggressive, cunning, resilient and adaptable.

The Kharaa.

Whenever there's an incident involving alien micro-organisms, it's a perfectly natural reaction for most sane folks to suspect a potential Kharaa infestation. Nine times out of ten, you're bang on the money. I was still looking at this one with an open mind, mainly because there were none of the usual tell-tale signs associated with a Kharaa outbreak in this base. No heaving mats of sentient biofilm underfoot, no pulsating cocoons or chrysalids glistening with slime, no lightning-fast attacks from unspeakable horrors lurking in the shadows... Absolutely nothing even remotely untoward happening here, so far. I deliberately loitered in a darkened corridor and chatted with JUNO over the commlink for a full ten minutes, hoping to draw out anything that might be waiting in ambush.

It's still too early to say for certain, but I'm guessing this infection isn't a Kharaa thing. Unless I'm reading the total absence of any apparent signs of an infestation incorrectly, of course. We'll see.

Hidden doors intrigue me. Someone has taken great pains to conceal this one from the casual eye, although its outline stuck out like a sore thumb, particularly when viewed in the infrared spectrum. There is a minute air pressure differential on the other side. The air flowing between this room and the space beyond cools down slightly as it passes through the tiny gap between the door and the surrounding rock. A deep scan of the door revealed a narrow corridor running approximately 50 metres through solid basalt. If this doesn't indicate there's something particularly interesting beyond that door, I'll hand in my official 'X-Files Junior G-Man' badge.

Half a metre of Plasteel, faced with a 100mm-thick heatproof aluminium oxide coating. Eight-point magnetic bolt locking system. *Sneaky buggers...* My sensors also detect the presence of an explosive compound called 'Molanex' concealed beneath the aloxide coating. Shaped charges, big badaboom. Guess that neatly puts the kibosh on cutting my way through with a hand laser.

This area used to be Torgaljin Corp's operations centre. Most of the equipment here is powered down, although it shouldn't take too long to fire it up. I dived one of the data terminals and started poking around in the base's files, searching for the door's access code. No luck there. I suspect any access beyond that door would be reserved to a select few, as it didn't even show up on a schematic of the base. However, this wasn't entirely an exercise in futility. I discovered that this base had been constructed on a considerably more impressive scale. Even more importantly, Torgaljin Corp weren't responsible for building any of it. It has been standing here for centuries, possibly millennia.

I'm guessing there's far more to this place than I'll ever find by ferreting around in an average worker's data terminal. Time to head into Big Boss Territory.

The last time that I walked through these doors, events were a wee bit too hectic for me to pay very much attention to my surroundings. Now that I was actively on the snoop, I found plenty of intriguing things to investigate. For a start, all surfaces in this section of the base appeared to be fabricated out of something other than basalt. A dark green material, reminiscent of nephrite jade. Calcium magnesium silicate, for the geologically inclined. However, it defied spectroscopic analysis, leading me to believe that it might be an artificial nanotech material or something entirely alien in origin. Its structure didn't seem to correspond to a naturally occurring mineral or any known metal, although it exhibited some interesting properties that could be observed and measured.

Every surface was covered in intricate, deeply-etched pictographs of a vaguely Mayan style. Upon closer examination, those carvings actually resembled complex electronic circuitry. Viewed as a whole, it seems as though this section's architecture is based on the shape of artificial bismuth crystals. Best possible guess; these surfaces were deposited by some form of nano-lathing technology similar to ours, although it is extremely doubtful that any human hands were involved.

One thing was immediately apparent. Power flowed through this entire structure. The material glowed from within. Small sections of its carved surface briefly illuminated with a soft green-tinged glow, only to fade and reappear somewhere else. It was like watching a huge machine's operational mimic board in action, each glowing section reporting the status of some unknown apparatus, then moving on to interrogate the workings of another system. I'm fairly certain that if I watched this

display long enough, some sort of intelligible pattern might emerge. Although it was fascinating to watch, its actual purpose is not readily apparent. Quite possibly something to do with energy management and power transfer systems, but rendered on a truly gargantuan scale. Interesting.

There was something about these surfaces that positively invites you to touch them. 'Visually tactile', I suppose you'd call it. After scanning to detect any potentially lethal current that might be flowing through the wall, I reached out and touched a small panel cautiously. It lit up beneath my fingers momentarily, then faded. I received a distinct impression of almost limitless power flowing through this strange material, yet it seemed to be incredibly diffuse, as if unfocused at present. The Great Machine is barely ticking over, presumably. Precisely which device that panel controlled, I have absolutely no idea. Even though there was no apparent response other than the illumination effect, I was able to determine that some of these panels are indeed controls of some kind. Probably not a good idea to start pressing them at random just to see what happens.

I examined The Big Desk. The former nexus of Torgaljin corporate might on this planet. It was more or less as I remembered it, an incongruous altar of laser-cut polished basalt sitting at the head of this cavernous room. It would have been an intimidating sight, particularly to any low-ranked Torgaljin workers called onto the carpet. It struck me as an unnecessarily vulgar and conceited display of illusory executive 'power'. Give me a three by one-point five metre engineer's workstation any day. I'll show you what Power *really* is.

The desk's data terminals were still operational. I sat down, and four standard 2D monitors rose from the gleaming ebony surface on articulated arms, each screen displaying the Torgaljin Thor's Hammer corporate logo. Just for fun, I replayed Baat Torgal's voiceprint at the login prompt, and was pleasantly surprised to see that the command was accepted. Switching over to holographic interface, I proceeded to trawl through several hundred petabytes of fresh data that had steadily accumulated after our first *friendly* chat with Baat Torgal.

Apparently, we had missed snagging his secured backup files during our purge of the base computer systems. I had to perform a side-by-side comparison of the original data in order to match it with what was currently held on file. Sure enough, there were discrepancies. Some were obvious, others not so much. Two particular crypto files caught my attention immediately: PRECURSORS and CARAR.

"IANTO, take a good look at this data stream. I've already given it a quick once-over, and I think it has some bearing on that virus outbreak in the colony. Keep me posted."

"Affirmative, Captain. JUNO and I have already tested a number of potential antiviral compounds *in vitro*, although they will require significant further development before they can be safely administered to human patients. Of our two most promising antiviral agents, one is extremely toxic to human cellular metabolism, and the other immediately attacks the nanite delivery system. Suffice it to say, our rate of progress is extremely slow, Sir." IANTO replied.

"Slow or not, you're still making some headway. Good work, people."

"Thank you, Sir. IANTO, over and out."

Precursors. That explains it all. My greatest mistake was in assuming that this planet was previously inhabited by a variety of non-sentient life forms, presumably similar to the gigantic skeleton I'd

discovered in the Lost River biome. I was thinking about Terra's age of dinosaurs, when I should have been thinking about a living, breathing example of the Atlantis myth. Obviously, my next job is to find out precisely what happened to this Precursor race.

But first, let's see what's behind Door Number One.

Baat Torgal's expertise in biochemistry and genetic engineering saved the *Degasi's* survivors. That much is obvious. I believe that I've found the remains of his first laboratory in the Jelly Shroom cave, although none of the PDAs I've recovered so far contained his research notes. Finding the CARAR file in his private terminal is our first real break, although we'll need some specialized laboratory equipment to start producing a cure. I'm guessing that corridor leads to his laboratory. It was marked 'Special Projects' on his terminal schematic, although this research facility is bloody huge. Rather more space than one might need to plonk down a batch of Petri dishes and a Bunsen burner.

After activating the door's icon, I sprinted for the corridor. There was no way of telling how long that door would stay open, or whether I'd need some sort of ID tag to pass through any additional doors once inside. Those minor details were nowhere to be found, unfortunately. As soon as I cleared the doorway, I made a point of checking that there was indeed a door release mechanism on the other side. Nothing spoils an epic adventure quite like the sound of a five-tonne door slamming shut behind you. Permanently.

Inside the corridor, the air carried a peculiar scent. A faint musty, earthy smell with highly unpleasant undertones. It might be coming from an agricultural research plantation that was supposed to be in there. The basalt corridor opened out into another large atrium decorated in the now-familiar Precursor style, and I could see what looked like a fairly extensive laboratory complex along the back wall. Either side of a broad walkway running the full length of the room, row upon row of grow-beds were laid out with geometric precision. I stopped at the first one I came to, and extended the sampling unit's probe.

One look at the grow-bed's contents was enough. The growth media was supposed to be supporting a small crop of genetically modified Chinese potatoes, although I definitely wouldn't want a plateful of whatever was growing in there now. Ever found a long-lost cup of coffee, only partially consumed? Now imagine something far more puke-worthy sitting in the bottom of that cup.

It looked like a festering grey-green scab. The entire surface of the artificial growth medium was covered in a centimetre-thick mat of some vile fungoid growth, glistening like fresh vomit. Of the potatoes that used to grow in there, only a handful of withered stalks remained. It was as if all nutrients had been sucked out of the synthetic soil by that obscene growth. I conjured this must be the same blight that attacked the colony's hydroponics bay. I'll know for certain when I take samples in there on the return leg of this mission.

Every grow-bed was in an identical condition. I sampled forty of the four hundred beds at random to obtain a representative fraction of the whole array, then headed towards the laboratory complex. The only access point appeared to be a man-sized airlock, which meant that bio-safety protocols had been in force inside the facility... Right up to the point where they had failed. Baat's team had neglected to install a second airlock and decontamination facility between the access corridor and the base, and that's presumably what allowed this blight to spread. Rookie mistake, Kid.

Unless... Someone else has been messing around in here without the faintest idea of what they were doing. That's a possibility I don't even want to consider. The consequences would be horrific.

Bloody hell. Something tells me this job is going to need more than a few bottles of hospital-strength bleach and a lot of elbow grease. For a supposedly first-stage Kharaa infestation, this growth is following an entirely unfamiliar pattern. No visible signs of motility, no cyst formation and no apparent colony spread beyond the growth media in the beds. Given that this infestation has been sitting here unmolested for quite some time, this place should be a seething mass of Hell-spawned alien abominations by now. There must be some chemical agent present in the atmosphere or another unknown factor inhibiting its spread. Something that I've obviously missed.

I entered the airlock and started the decontamination cycle. Pressurised jets of highly-chlorinated detergent blasted me from all sides, sluicing away any surface contaminants as the first stage of the treatment. Next, the compartment was bathed in intense UV radiation for five minutes. A second series of chemical sprays followed, using a range of acidic disinfectants to neutralise the preceding alkaline agents. I nodded with satisfaction, noting that Baat Torgal had at least got this part of it right. One more station like this at the head of the facility's access corridor would have provided an almost ideal level of bio-security. The entire decontamination cycle took fifteen minutes to complete, so this wasn't something you could hurry along.

However, the decontamination process was manually activated. Minus several billion points for that careless little oversight, *Torgal-kun*. We can't all be bio-engineering prodigies, you know. Of course, you'd have to be wearing a hazardous environment suit to survive that decontamination run. Our meddlesome friend (or friends) presumably breezed through this chamber without attending to any of the necessary precautions, with entirely predictable results.

The place had been ransacked. That much was painfully obvious. Drawers and cabinets lay ajar, cryogenic storage units carelessly left open, their supply of liquid nitrogen having boiled away into the lab's atmosphere months, or possibly years ago. I felt a white-hot rage rising inside me, knowing that idiot hands had pawed blindly at things they couldn't possibly understand. Here, of all places! - Where a single tiny glass phial could unleash suffering and death on a cosmic scale, yet their simian fingers had pried and poked through this collection of biological horrors without a second's thought.

Disgusted, I started scanning everything that I could find in the laboratory. There was no point in attempting to salvage any of the equipment here, since it was all hopelessly contaminated with any number of unknown organisms. The risk was simply not worth taking. This equipment could be fabricated easily enough once I had its blueprint. All data terminals were in lockout mode, undoubtedly as a result of *somebody's* ham-fisted attempts to gain access. Rather than waste time unlocking and scanning each terminal, I dived the system's central core and scooped out everything it contained, transmitting the entire file system straight to JUNO and IANTO. They should be able to make more effective use of this data than I could at the moment.

I swept through the whole lab complex, slowly and methodically. If needs be, we can now re-create this entire facility down to the last Petri dish. Eventually, I came to another Level IV bio-safety airlock and decontamination chamber. After completing the cycle, I exited the airlock to find myself standing in another immense Precursor facility. Unlike any room I had seen so far, this one contained operating examples of actual Precursor machinery. Most of it was unfathomable in form

and function, although some systems were immediately recognisable. Stasis pods. One thousand, five hundred of them, to be exact. And each one was occupied.

It came as no real surprise to discover that those stasis pods contained Sea Emperor and Dragon Leviathan embryos. These creatures were either a product of Precursor genetic engineering, or the final evolutionary form of the Precursors themselves. I felt more inclined to believe the latter case. What better way to ensure the continuity of a species such as this?

The longer I thought about it, the more sense this arrangement made. A large population of Sea Emperors and Dragon Leviathans would require enormous quantities of food, making it necessary for the Dragons to spawn ever-increasing numbers of prey species in order to support increasing numbers of Leviathan-class creatures. This would eventually become an untenable position. Sooner or later, these Leviathans would be directly competing for territory and resources, and that would not bode well for them. One Sea Emperor and four Dragon Leviathans as his consorts definitely appears to be the optimum survival configuration for these mighty creatures. Considering the usual range of alternatives offered by Nature, this struck me as a highly sensible arrangement.

After inspecting the stasis pods, I explored a number of smaller side chambers in the facility. Some rooms contained a wide variety of enigmatic devices, presumably life-support equipment for the pods, while others contained storage banks of genetic material obtained from all other life forms that inhabit *Manannán*. I was extremely careful to avoid interfering with anything in here, ever mindful of the fact that the future of an entire civilization is housed in this place.

I have been in the Lava Castle for more than ten hours. There is no telling exactly how far this complex extended beyond this point, and no apparent way beyond the force-shielded portal that now blocked my path. There was something that resembled a wall-mounted communication panel, although I was understandably reluctant to activate it. For all I knew, it could trigger an automated defence system, revive the Precursors or dispense a cup of coffee. You can't just waltz around an alien installation pushing buttons at random. I can't stress that one simple fact strongly enough.

However, that decision was forced upon me.

As I approached the portal, a green energy beam shot from an emitter concealed in the lintel of the doorway. It scanned me rapidly from head to foot several times, then promptly shut off. The communication plate made an unintelligible sound, and the force shield also deactivated. I guess this means that I've got clearance to enter this area after all. I proceeded through the portal warily, half-expecting something nasty to leap out at me as I entered the room.

This chamber was noticeably smaller than the others, but not by much. It was empty, save for a man-sized rectangular pillar of Precursor design. It also bore a faintly glowing rectangular plate, similar in form to the one I found near the entry portal. At a guess, I'd say this object was probably an information terminal of some kind. The device activated as I drew nearer, projecting the holographic image of a vaguely familiar creature. It wasn't a Warper or a Sea Emperor, although this entity shared certain cranial features with both species. This could well be the Precursor version of an AI construct. With any luck, I might be able to communicate with it, assuming that it understands my imperfect command of the current form of the Warper language. I activated the Warper camouflage field, gesturing politely at the avatar.

"Warm seas, Friend. I am Father of Shells. I come from another place, far above-sky."

The entity nodded slowly, apparently in acknowledgment of my greeting. A most promising start.

My communication link has gone dead. Most probably blanked out by the sheer amount of rock between me and the outside world. This isn't a huge concern at the moment, although it meant that I would be out of contact with the crew for the duration of this meeting. All the more reason to keep this conversation short and sweet.

"This one is called Keeper of Memories. You bring Father of Tides back safe from Dark Place."

One thing was immediately apparent. *Keeper of Memories* used a considerably more coherent form of visual communication. I was anticipating another session of '*Darmok and Jalad at Tanagra*', but suddenly found myself confronted with an entity who seemed able to converse almost normally. We were still using Warper gestures and colour shifts at this point, although it might be worth attempting a more direct form of communication. Metaphor and cultural allusions are fine for expressing simple concepts, but sooner or later, one of us will be asking some hard-to-answer questions. I need more precise tools for the task at hand.

"My name is Alexander Selkirk. Do you understand me?" I asked aloud. *Hell, it's worth a try.*

Keeper of Memories seemed surprised by the sound of my voice. I was rather more surprised when he answered in Terran Standard. A ponderous, ancient voice. Unmistakeably alien in its peculiar intonation and vocal stress, although it's perfectly intelligible to human ears. I suppose my Scots accent has much the same effect on Sassenachs, so I'm in no position to pass judgement on him.

"Spayk. This one know spayk. Old thought-form. Many tides beyond counting." Keeper said slowly.

"Good. I hear you. I come here to find help. Find things of time before." I deactivated the Warper hologram, replacing it with an image of an infected colonist. "There is sickness growing in the Lost Ones. My people. Sickness comes from here. I come here to find cure for sickness."

"Sickness not coming from here. Coming from place beyond-sky, like Alexanderselkirk. Sickness is seeds of Enemy. Sickness make more Enemy grow here. We fight Enemy this place, many tides beyond counting. Enemy change. We change. Changed we destroy Enemy. Make this place clean again."

"Your people changed to fight this Enemy? How?"

"Changed life-stuff deep inside to become Others. New forms. Forms stronger than Enemy."

"Enemy is here in this place. Enemy has also changed." I said bluntly.

"No. Enemy is gone. Sky-fire destroys all unclean life that comes to this place. You are clean."

I frowned. Sky-fire? - Could Keeper be referring to a planetary defence system of some kind? I already knew the Warkers had shot down *Aurora* by opening a portal in one of her plasma conduits, then dumping in ten tonnes of seawater. This 'sky-fire' thing sounds like something completely different.

I projected holograms of various Kharaa life forms. *Keeper of Memories* recoiled in frank disgust.

"*Enemy.*" Keeper said contemptuously. "*Unclean.*"

Time to give him the wake-up call. No time for delicacy, I'm afraid. To drive the message home, I projected an image of the contaminated growth-beds in the Torgaljin research facility outside.

"Enemy seeds. Here, in this place. Now." I said grimly. "They sleep now, but will grow soon."

"*Not possible!*" *Keeper of Memories* protested fiercely. "*This place is last hope for all life! Burn all seeds of sleeping Enemy, or all is lost!*"

"I see this. We have a sickness in Lost Ones shell, but cannot put an end to it. We need your help!"

"*Your deep life-stuff is not same as other life in this place. You will all die.*" Keeper said flatly.

That last bit was a right puzzler. *Your deep life-stuff is not same...* Could Keeper mean that human DNA is too different to be cured of the Kharaa infection, at least by the same method that the Precursors used to cure themselves? Of course it's bloody-well different! All life here is based on a triple-helix DNA molecule manipulated by the presiding *Father of Tides*, gorram it!

"Tell this one how your people destroyed the Enemy inside, and this one will burn the Enemy. Make all life clean in this place as it was before. Destroy all Enemy seeds."

"*Other deep life-stuff we make burns the seeds from within. Where we swim, no Enemy can live.*"

Bingo. The creatures here secrete something that attacks the basic Kharaa micro-organism before it is able to establish an Infestation. Take away that initial foothold, and you've basically defeated them. Makes perfect sense. If the viral infection reaches that critical point unchecked, the first colonists to die will decompose to become Infestation nodes. Within 24 hours or less, that initial Kharaa colony will be pumping out its first batch of Skulks. It wouldn't take long before *Kaori-san no-shima* became a slaughterhouse, crawling with rapidly-evolving Kharaa. It sounds as callous as hell, but I'd light off a nuke in there long before it got to that point. And I'd be in there with them, ready to press the button.

"Show what shape this deep life-stuff takes. Show this one how it burns Enemy." I insisted.

Keeper of Memories readily complied, projecting an image of a Sea Emperor literally hosing down a Kharaa-infested patch of seabed. A swirling torrent of luminescent green fluid poured from its mouth like dragon's breath, surging over the corrupted and decaying life and adhering to every surface that it touched. Its effect was almost instantaneous. I could see the infestation shrivelling and dying within minutes of contact, leaving only an inert grey scum that dispersed slowly in the current. If I could lay hands on a millilitre or so of that stuff and have IANTO reverse-engineer it...

"Now show this one *Father of Tides* life-stuff small. Show it very small, smaller than smallest sand." I prompted eagerly. Fingers crossed. At this point, I fervently hope that the Precursors have developed some form of molecular imaging technology. *Keeper of Memories* appeared to hesitate briefly, as if unsure of what my request actually meant. His first attempt at interpreting it left a wee bit to be desired. An image of a solitary drop of Kryptonite-green goo rotated in the air.

Close, but no cigar, Jimmy.

"Good. Now show smaller than the smallest grain of sand." *Eureka*. It's an organic molecule. Hopefully, either JUNO or IANTO will know exactly what that molecule is. I most certainly don't.

Even though I had a fair idea of how the Precursors defeated the Kharaa at a microscopic level, I had to ask *Keeper of Memories* how they were able to combat the larger organisms. Not such a daft question, as it turned out. Considering most of the known Kharaa life forms appear to be specifically adapted to life on dry land, Kharaa wouldn't have posed any significant threat to the Precursors until they were able to evolve into specialised aquatic or amphibious forms. Obviously, this would have taken some time. The Precursors were well aware of this, and reacted accordingly.

"Enemy changed to new shapes, swimming down to consume all life in this place. We see this change coming in Enemy, make new shapes for ourselves. They make new life. We make new life. Long Talon, Far Jumper and Sky Fire Swimmer hunt down new Enemy that swims. Make many small and sharp-toothed shapes to watch in dark places. Strike fast, many teeth. Make Small Thunder and Life Drinker to hide in small dark places, watch and wait. Enemy come. Enemy not see. Enemy die."

This explains a great deal. Guess it wasn't a paranoid delusion after all.

I've always suspected that the sea life on *Manannán* was out to get me. In fact, it's more a case of mistaken identity, at least as far as most of its creatures are concerned. They're genetically hard-wired to be blindly aggressive toward *any* strange life forms, and that definitely included Yours Truly.

I shudder to think of my survival chances if I hadn't gone out of my way to make contact with the Warpers and *Father of Tides*. For one thing, Warpers are one of the most potent hunter-killer units fielded in this planet's war against the Kharaa. It doesn't take a great stretch of the imagination to see why. Even Skyrays and Reefbacks played major roles in this conflict, apparently. As aerial reconnaissance drones and practically indestructible heavy assault troopers, according to Keeper. Faced with this level of opposition, I almost felt sorry for the Kharaa. Almost, but not quite.

Only one final detail remains before I can take my leave of *Keeper of Memories*. Sky Fire. He mentioned a 'sky-fire swimmer' earlier, so I can safely assume that he was referring to Amp-Eels. However, I'm guessing that this allusion to lightning also extends to the Precursor planetary defence system. Keeper was understandably reluctant to reveal its location, and even less forthcoming about its exact nature.

"Sky-fire is not for you to see. Not yet. Nothing Unclean can come to this place and nothing Unclean will go from this place. Enemy seeds must not be carried to other worlds. Life is sacred. Ask Father of Tides. Speak with Sky Watcher to know the shape and workings of Sky-fire."

Well, that was delightfully cryptic. We must do this more often.

After bidding *Keeper of Memories* a fond farewell, I headed for the airlock. The time is now 03:45, so I should be back at *Kaori-san no-shima* in roughly 40 minutes. Once through the first airlock, I made one final visual sweep of the laboratory as I passed through, then moved on to the next airlock for another jolly decontamination cycle. Still no luck on that comm-link signal, though. There won't be

any signal until I'm in the Lava Castle itself. I finally cleared the hidden access corridor, *et voila!* Five solid bars of RF signal strength. Splendid! I urgently need to take a massive data dump. 'scuse me...

+++ PROXIMITY ALERT. LIFE FORMS DETECTED. CAUTION ADVISED. +++

What the Hell?

Polyakov.

I found myself staring down the muzzles of six PPSH-41 submachine guns. World War II vintage. Devastating rate of fire, very effective at close quarters... And extremely easy to fabricate, it seems.

"Hello, Robot." Polyakov grinned nastily. "Did you find what you were looking for in there?"

I sighed theatrically. "Let me guess. This was all part of your cunning plan to lure me here alone. Well, that makes me quite the dumb bunny, doesn't it?"

"*Da*. You couldn't resist another chance to play the mighty *bogatyr*. Now that you have kindly started building our rescue ship, you are no longer useful to me. Your crew will finish it for us, and we will leave. If I am feeling generous, I will let them stay here to put flowers on your grave."

I chuckled quietly, shaking my head.

"Sounds like you've dreamed this caper up while sitting on the privy, Chum. If you want my advice, stick to reading *manga*. There's no way my mates will let this pass unanswered. For a start, they will go full MARTIAL on your sorry carcasses. You'd best re-acquaint yourself with this charming place right now, because this is where you'll end up. You each get three free rides on the Valkyrie Field, and that's it. I wasn't kidding."

This news didn't sit well with Polyakov's team. There's definitely some frowny faces in this room. I'm guessing that he didn't tell them about my little wrinkle in their resurrection arrangements. Time to apply a wee bit more pressure.

"Nice shooters, by the way. I never figured you as a creative sort, Armin Mikhailovitch. Congratulations. You've genuinely surprised me." I nodded approvingly.

Polyakov shifted his stance uneasily, glancing warily around the atrium.

"You're stalling, Selkirk. Enough talk." He deftly cocked the burp-gun, raised its muzzle and fired.

"ALECTO, lights!" I yelled.

The atrium went pitch-black instantly. I dived for cover behind one of the stone benches, narrowly avoiding a faceful of 7.62 calibre copper-jacketed titanium. I quickly shucked the sampling unit backpack and shoved it under the bench, out of harm's way. Thermal imaging kicked in, revealing the bluish forms of Polyakov and his men still standing dumbfounded where I'd left them. Their dive suits were still sopping wet and cold, almost blending in with the thermal background, although their exposed faces glowed white-hot in the IR spectrum. Easy targets.

No more pissing around. I'll make this as quick and painless as each one deserves. Polyakov first.

The security team were still bunched together, although they at least had sufficient presence of mind to form a defensive circle facing outwards. Polyakov fired a short, scything burst blindly into the darkness, deliberately aiming low. Target identified and marked. His men followed suit, sending an aimless volley of rounds into nothing in particular. Ricochets whined. Spent casings tinkled onto the deck, then silence reigned. Their gun barrels now glowed a warm orange. I moved quietly, circling the group and marked each one of his deputies, adding their positions to my tactical display.

"Armin Mikhailovitch Polyakov, you and your confederates stand accused of armed insurrection, sabotage and biological warfare. You have heard the charges laid against you. How do you plead?"

Polyakov guffawed loudly in the darkness.

"Hah! I cannot believe this Selkirk! He thinks he is *ofitser politzii* now! - Who gives you the right to interfere in our colony, *meneer*? You have no authority here."

"That's where you're wrong, Armin." I said calmly. "My authority comes directly from your colony's governing committee. You have knowingly infected the colonists with a lethal alien pathogen. If you surrender immediately, you have my word of honour that you and your men will not be harmed. This is your final warning."

"You always talk too much, Selkirk." Polyakov snarled. "Any *real* man would have shot us all by now. Now you try to kill us with your endless words. You are pathetic, Robot."

I could see the security team tensing up. Polyakov had whispered a command to activate their suit floodlights on his word, hoping to catch me unawares. It was a fairly simple matter to calculate the firing arcs of each man, then quietly put myself out of the immediate firing line. Polyakov was using the sound of my voice to fix my position, so I kept moving to throw their projected aim points off.

"What's the plan, Armin? I conjure I'm about to die, so you might as well tell me." I said mockingly.

"I don't think so, Selkirk." Polyakov smirked. "You are stalling again. Do you think I'm stupid?"

I shrugged. "Yes, actually. I've just searched through every known Terran language lexicon, and there isn't a single word that adequately describes your own unique level of stupidity. Tell me one thing though... Did you bother to immunise your men before releasing the Kharaa pathogen?"

Polyakov snorted derisively. "Naturally. I found Baat Torgal's data on the cure for the Carar stored on a Mampak passed on to me by my father, along with terminal access codes and fabrication blueprints for old military weapons. Remember, you are not the only resourceful man here."

"Okay. You've immunised your men with a century-old therapeutic compound. Sounds fine to me."

The security team appeared to be completely unsettled by this news. The formation's alert posture suddenly faltered, and I could see a couple of them unconsciously rubbing their upper arms. No doubt Polyakov had merely slapped an (expired) dermal patch on each of these goons, loudly and proudly pronouncing them totally immune to the Kharaa organism. That one casual statement of mine just blew a massive hole in their misplaced confidence in Polyakov.

All pieces are in their final positions. Now for the end game.

By the time Polyakov regained control of his team, I had circled around them to reach an optimum firing position. All six were clearly visible in infrared, targeted and locked. My flechette rifle has a full clip of fifty rounds; more than enough ammunition to finish the job.

I sighted on Polyakov's chest and fired. A tight cluster of 20 Plasteel razor darts obliterated his heart. With a choked gurgle, he pitched backward and fell lifeless on the deck. Five more shots fired in quick succession. Five more corpses.

Although I've been on the receiving end of the Valkyrie Field's tender mercies, I wasn't entirely certain what would happen next. At a guess, I'd say that their bodies would be converted into a matter-stream by the Field, and then reassembled at a designated resurrection point. In this case, that would be the Lava Castle's medical bay. Polyakov and his team would be in no shape to offer any further resistance, at least for a couple of hours. The whole 'dying' experience tends to be fairly taxing on the human nervous system. To make this process slightly more tolerable, the Valkyrie Field induces a brief comatose state in its patients, permitting all bodily functions to re-integrate fully before regaining consciousness. Having been there myself, I consider this phase a rare kindness.

My communicator beeped. DIGBY.

"Selkirk here. Go ahead, mate."

"Apologies for my late arrival, Captain. JUNO relayed the pursuit order as soon as *Esperanza* left its moorings. Are you all right, Sir?"

"I'm fine. Polyakov and his Flying Circus, not so much... Now mostly dead." I said wearily.

"Regrettable, but absolutely necessary. What are your orders, Sir?"

"I'll need you to make those dirty scunners more comfortable in the Med Bay. Full body restraints, set up life support IVs and prep them for extended stasis. I've still got a few more locations that need to be sampled for Kharaa contamination. I'll meet you there in approximately 30 minutes."

"Very good, Sir." DIGBY replied.

As all neurochemical functions ceased in the bodies, each corpse simply dissociated like a reclaimed base construction element. No dazzling rays of light, no celestial choir. A brief shimmer formed around them, and they were gone. Efficient, if nothing else.

I have also been efficient. Altogether too much so. There is no sense of triumph to be found here. Even though I could justify this action in entirely neutral terms, there is no denying the fact that I have just killed six people. Even though they will be revived, that fact still remains. I can't even draw solace from rationalising it as self-defence against superior numbers, mainly because they never stood a chance. More red on my balance sheet. I'm going to have to live with this.

Polyakov's eyelids fluttered open. I stood over the gurney, regarding his naked form impassively. Even without a microscanner, I saw the first signs of the Kharaa organism spreading throughout his body. The Valkyrie Field had completely failed to detect and eradicate the virus. I feared this would

happen, since I had been considering the possibility of using the Field as a desperate final measure if all other treatments failed. Albeit unwittingly, at least Polyakov has provided us with valuable data.

He chuckled weakly.

"You win this round in our game, Robot. Next time will be different."

Smiling grimly, I leaned over and whispered. "No, it won't. You're all dead men. Welcome to Hell."

I walked over to Polyakov's bedside IV infusion pump and patted it fondly.

"See this? As soon as I've finished our wee chinwag here, I'm putting you and your hooligan mates out for the duration. I've grown tired of constantly watching my back, and having you lot skulking about loses its amusement value after a very short while. Rather than suffer your idiotic antics any longer, I have taken you out of the equation permanently. You are finished."

Polyakov strained against his bonds, his face crimson with fury. "You don't scare me anymore, Selkirk. I promise you, I will repay this insult a hundred times over. You and your *shlyukha* will be first, followed by your robot friends..."

I held up my hand, silencing his imminent rant. Heard it all before, anyway.

"No, mate. You'll be lucky to ever see daylight again. Once we have isolated the specific antigen to use against the Kharaa infection, you will all be immunised against it. We'll also have to come up with a way of destroying this bug at its source. That's where you and your men come in. You'll all be supplied with appropriate Level 4 biohazard gear, microscanners and decontamination equipment. Every square millimetre of this installation needs to be sterilised, and you lot are going to be the cleaners. I wouldn't get any ideas about refusing, either. That immunization only protects you from the Kharaa micro-organism. If you and your mates do decide to sit on your fat bahookies instead, you'll be up to your fetid armpits in ravening Skulks and Gorges before you know it. So, a little incentive already exists. To make absolutely certain, we've taken away your means to make any more *Pa-Pa-Shas*. Okay?"

Polyakov glared at me sullenly.

"So, we are all expendable now. You will let those Kharaa monsters do your dirty work for you."

I sighed heavily, pinching the bridge of my nose in the manner of a supremely irritated teacher.

"Armin, you and your men are eminently expendable. You have practically volunteered for that job. Frankly, you should be grateful that I didn't arrange it so that you'd resurrect in the middle of a Reaper pack. Quality of mercy not being strained, and all that. It's not all bad news, though."

"What do you mean, Selkirk?"

"Well, at least you weren't responsible for the blight that hit the colony's hydroponics bays. That happened long before I came on the scene. I've just seen a preliminary analysis of the samples I obtained from there, and it wasn't a Kharaa organism after all. Turns out that it was a recessive genetic error in some of the Terran food crops re-engineered by Baat Torgal. Finally made itself

known, I guess. That's the trouble with cybernetic skill implants... Heavy on the theoretical know-how, but bugger-all as far as practical experience is concerned. Money can't buy genuine talent."

Polyakov sneered. "You would have blamed me for that as well. Anything will do to make the committee's case against me stick, eh?"

"Not so. However, if it did turn out that you *were* responsible for sabotaging the colony's food supply, I'd currently be straddling your chest and choking the life out of your worthless body. You might want to display a little gratitude for my respect of due legal process. The evidence is definite. Anyway, that just about wraps up all I have to say on this matter. Goodnight, you living crap-stain."

That, as they say, is that. With Polyakov and Co. all snug a-bed in stasis, we can finally start making some progress. This wasn't an ideal solution to the problem by any stretch of the imagination, but it was a solution nonetheless. As for the long term, I'm still considering their eventual fate. If they are coming back with us to *Terra*, they'll definitely be making that trip in irons. In the meantime, it's quite sufficient to have them completely out of the way. Polyakov's the sort of chap you'd cheerfully kick into a jet turbine's intake, and I doubt any sane person would even bat an eyelid.

Still, there are far more important matters to attend to. DIGBY has volunteered to oversee the decontamination process at Lava Castle once we're ready, freeing me up to continue the construction of *Borealis*. JUNO and IANTO now have all the information and biological specimens they need to develop an antigen for the Kharaa plague, although we're going to need a viable sample of this 'Enzyme 42' from *Father of Tides* to verify that we're on the right track. Given Baat Torgal's almighty stuff-up with those bioengineered Chinese potatoes, you'll have to forgive my insistence on what might seem an unnecessary intermediate step. Sure, we can synthesise Enzyme 42 by the metric butt-tonne once we have a precise picture of its structure and properties, but not one second before. For all we know, that stuff may not be entirely compatible with human cellular biology. Remember, we're also the alien invaders here.

Five minutes out from *Kaori-san no-shima*, I radioed ahead to let the colony know that *Esperanza* was no longer under Polyakov's control. Judging by the stunned silence on the other end of the link, I can only assume that this was an entirely unexpected development.

"... Say again, Ulysses?"

"Alexander Selkirk here. Requesting docking permission and remote guidance handover for *Esperanza*. Awaiting your response Controller Savini, over." I repeated, slowly and distinctly.

"Uh, clearance granted, Captain Selkirk. Will you require assistance securing the prisoners, Sir?"

"That won't be necessary. I've left them back at the Lava Castle, banged up in stasis." I said coolly.

There was a moment's hesitation, then a text message came up on the communication console.

You may be answering under duress. Send two blank carrier waves to confirm. Security standing by.

"Hoy, Enzo! Grumpy and The Five Mental Midgets aren't here, mate. Told ye, they're long gone!" I activated *Esperanza*'s interior video feed, panning the camera around a hundred and eighty degrees. "See. Nobody's home. I'm in *Ulysses*, all on my lonesome."

"I'm sorry, Captain Selkirk. I wasn't sure if I was doing the right thing, but I had to check."

"No problems, lad. You did well to check. By the way, how's that sonar range gate of yours set?"

"Wound all the way out, Sir! - Just like you told me!" Savini replied eagerly.

I grinned. "Good man, Enzo. I'm anchoring *Ulysses* 150 metres out under full quarantine. Maintain a *cordon sanitaire* of 50 metres radius around this vessel until otherwise ordered. As she now contains extremely hazardous biological material, no human personnel may enter this secured area without a member of my crew acting as escort. Please notify all standing watch teams."

CHAPTER EIGHT

My communicator chimed softly.

"IANTO here, Captain. Please come to the Med Bay immediately. A decontamination lock has been installed on the starboard side of the module." He said tersely.

To save time, I exited *Ulysses* through the divers' lockout hatch rather than use the decontamination lock in the onboard research module. Considering that the Kharaa infection was already well established in the colony, stringent decontamination procedures when entering and leaving *Ulysses* would only be necessary once we are actively engaged in eradicating the organism. As it was, I have to enter via the colony's Med Bay decontamination lock anyway. Not much sense in doubling up.

Héloise, JUNO, IANTO and DIGBY were waiting for me as I exited the chamber.

"Okay troops, what have you found out about this Enzyme 42 so far? Can it be synthesised?"

IANTO projected a hologram of the enzyme's molecular structure. The image rotated slowly in the air, although I am none the wiser for it. I grimaced sheepishly. My current knowledge of biochemistry could easily fit on the head of a pin. That's something I'll have to look to very soon, or else I'm just dead weight in this particular crisis. Time for another software upgrade, methinks.

Okay Universe, I get it. This is my karma-imposed penance for rubbishing users of skill chip implants.

"What am I looking at? It's most definitely an organic molecule, but that's as much as I know."

"Cysteine protease, Sir. A rather unusual form of it, in fact. It's a left-handed version."

I rubbed the back of my neck awkwardly. "Isn't that property called chirality?" I ventured timidly.

IANTO beamed. "Precisely, Sir. This particular molecule will not interact with any proteins found in human tissue, since it is entirely the wrong shape, if you will. However, it will certainly degrade a wide range of cellular protein linkages typically found in Kharaa physiology. Extremely efficiently, as far as I am able to determine."

"That's a kindness. It wouldn't do to have a treatment that also attacks human tissue. Next question; have the colonists been notified of this outbreak yet?"

JUNO responded. "Yes Sir. Shortly after you departed *en route* to the Lava Castle. No further cases require clinical care as yet, although our preliminary screening tests indicate that at least 45 per cent

of the colonists are presenting with initial symptoms of infection. Current estimates indicate that infection will spread to the remainder within 72 hours. Unfortunately, the Enzyme 42 dermal vaccination patches recovered from Polyakov's quarters are completely inert. The active component has deteriorated to a point where it cannot be reverse-engineered to form the template for a fresh batch. However, Baat Torgal created a non-invasive biochemical scanning and replication device, so it should be possible to analyse and re-create the enzyme once a viable sample has been obtained. When we have that sample, mass production should be a fairly straightforward procedure."

"Looks like I'm up for another chinwag with *Father of Tides*. I'd best get cracking, then." I said.

As much as I would have enjoyed having Héloïse share another meeting with *Father Of Tides*, there is a definite element of risk involved this time around. According to IANTO's best guess, *Father Of Tides* probably doesn't secrete Enzyme 42 unless it's absolutely necessary. This means that the compound is only produced as a direct response to the presence of the Kharaa organism. Obviously, I'm going to need to produce a sample of infected tissue to stimulate that response, and that's where it gets risky. Naturally, this particular encounter needs to be handled delicately.

IANTO has fabricated a new piece of kit for me. He calls it a 'DNA Transfuser'. Looks roughly like an elongated propulsion cannon, although he assures me that all of its functions are perfectly harmless to the test subject. It's a portable biomedical scanner and gene sequencer combined in a single handy package, designed to analyse the genetic structure of any living creature and produce a transfusable serum of any of its selected physical attributes. Assuming that I was still occupying a human body, it would be possible to scan any one of *Manannán*'s organisms and inject myself with a serum that confers faster swimming speed, dermal armour, improved night vision, bioluminescence or whatever else lights your Tiki torch. In theory, this all sounds absolutely brilliant. However, the effects are only temporary and non-stackable, somewhat limiting its use as a dedicated survival tool. Most Reapers won't sit quietly while your Transfuser cooks up a batch of Bone Shark armour. Presumably, it would be less than edifying to discover what survival benefits Crash Fish have to offer the human genome. I'm in no particular hurry to find out.

But that's just my opinion. By all means, feel free to experiment to your heart's content.

The first DNA Transfuser was designed and built by Baat Torgal. I scanned one of his prototype units during my sweep through his research facility. Even though I could have simply picked one up, they were heavily contaminated with who-knows-what. Having the device in blueprint form made it much easier to correct a number of design defects in the original. The Transfuser I'm using is a considerably more sophisticated version. I admit to feeling a grudging respect stir for Baat Torgal. He may well have been an insufferable, preening little ponce, but he also had that rare spark of genius about him. This gizmo transcended anything a skill-chip alone could produce. Left to his own devices, that kid might have cut an impressive swathe through this galaxy. Probably not in a good way either, but he would have certainly made his mark. That must count for something.

Fifteen minutes later, I activated the call signal at the Talking Wall.

A Warper duly arrived, its mantle patterns flashing in cheerful greeting.

"Warm seas, *Father Of Shells*. How can this one assist you?"

"Warm seas, Friend. I must speak with Father Of Tides. The sleeping Enemy has awoken."

Without warning, an energy vortex flared in front of me, enveloping the Warper. It disappeared instantly. Seconds later, I was surrounded by dozens of rapidly forming vortices, each one heralding the imminent arrival of other Warkers. As they emerged, I felt the next best thing to a chill of dread.

Their customary array of shifting, vibrant colours was gone. Their skins were completely black.

One swam slowly forward, its talons raised menacingly. Pitiless alien eyes glared into mine.

"Where is Enemy? We hunt. We kill."

+++ CONDITION RED. ENERGY TRANSIENT DETECTED. MAGNITUDE: 6.5×10^4 TERAJOULES. +++

"JUNO? Speak to me, lass... A warning just flashed up on my HUD. What the photon's going on?"

"Captain! Sensors have detected a massive energy surge. Planetary scale, numerous points of origin. Focus of convergence... Pyramid Rock."

Hell. That's roughly the energy released by a 15 to 20 megaton hydrogen bomb. And it's all being pumped into an area only slightly smaller than the Duchy of Grand Fenwick. That's not a good sign.

"JUNO, Get some eyes on the scene, pronto!"

"Aye, Captain. Transmitting map overlay of all energy transient sources. Drones are underway. Pyramid Rock video feed will be available in 240 seconds, Sir."

I stared at the map, utterly gobsmacked. The Lava Castle has become a switchyard, routing power flows from dozens of concealed Precursor installations scattered all over the planet. I must have covered every square metre of *Manannán's* seafloor during my travels, and I've never detected *any* of those structures before. The network resembled an asymmetric spider web. No rhyme or reason at all to its overall layout, although its function is immediately obvious. The Lava Castle is an ideal site for a honking great geothermal power station, and all of those sub-stations have been quietly trickling energy into the planet's crust, storing it in geological strata for countless years. The entire planet has been transformed into a geo-capacitor with an insane potential output. Suffice it to say, something HUGE is powering up on Pyramid Rock.

The drone video feed came online. At first, I wasn't entirely certain what I saw. There was some kind of hazy distortion forming at the northern end of the island, uncomfortably close to the site of the ARGUS satellite launch pad.

"JUNO, what's the read on that distortion field? - Is a spatial warp forming on the island?"

"No, Sir. The energy signature appears to be analogous to our nano-lathe construction field."

"Bloody hell. Whatever it's building, it's going to occupy a decent chunk of terrain. I only hope it doesn't take out our storage bunkers... Or worse still, breach the RADSAFE facility. We stored four neutron accelerator silos in there, and it's still hotter than Hades." I said grimly.

An outline formed, tentatively at first. Power surged through the planet's distribution grid, pouring into the construction beam at an unimaginable rate. I could make out the ghostly lines of a monolithic structure about 100 metres square, extending high above and far below the water's surface. It had the distinctive Precursor look about it, vaguely resembling a skyscraper fused with a Mayan sacrificial pyramid. A secondary construction pattern 150 metres in length began to coalesce on one side of the pyramid; blocky, elongated and tilted skyward at an angle of 20 degrees.

The building process took about five minutes to complete. Mercifully, none of this ominous structure's components came close to damaging any of our onshore facilities or storage bunkers.

Unless I'm very mistaken, the inhabitants of this planet have just gone straight to DEFCON One...

And I'm staring down the barrel of the proverbial 'Cocked Pistol'. Oh, crap.

This must be the silverware they use for *particularly special* occasions.

I don't know how many planetary defence cannons you've seen during your travels, but this one is about as impressive as they come. No known class of Terran warship could carry one. This was a weapon that would get a taciturn nod of approval from any self-respecting dark overlord, along with a quietly menacing command to build many more of them.

Now, you're probably thinking that something this size would be a sluggish performer in the anti-aircraft stakes. Not so. Within seconds of completion, the turret rotated through a full 360 degrees in only five seconds. At the same time, the cannon's barrel moved through its complete arc of motion thrice in the time it took the turret to complete a single revolution. Make no mistake; this turret is entirely capable of tracking and engaging a high-speed target. An approaching starship in high orbit would be easy meat, although an agile atmospheric fighter wouldn't last too much longer.

Apparently, *Aurora* wasn't sufficiently threatening enough to warrant The Big Gun treatment. All it took was one Warper popping a hole where no holes should ever be popped in a starship's drive system, and that was it. Now that the Kharaa have been mentioned in casual conversation, more shall we say, *direct methods* have been called into play. I think that I finally know why.

Most folk seem to think that Kharaa can only travel between star systems aboard ships they've infested. Unfortunately, that's not the case. Kharaa can also travel independently over interstellar distances, by creating space-faring organisms called 'Spore Ships'. Millennia before Terrans acquired space flight capability, Kharaa hive minds assimilated the original Spore Ship genome, adapting its organic solar sail and bio-stasis pod to suit their own purposes. Although each spore ship can only carry a single dormant Kharaa hive and its transit times are often measured in centuries, this is still a highly effective means of quietly spreading the Kharaa infestation. Of course, this slow and steady approach can also deliver sufficient viable hives to launch a devastating *blitzkrieg* attack on a planet. The Precursors clearly had this prospect firmly in mind when they created that defence turret.

Seemingly oblivious to the ring of furious Warpers that surrounded me, I continued to watch the drone's video feed with a mounting sense of dread. Its motion checks complete, the weapon swung around abruptly and elevated its muzzle, aiming at an empty patch of sky. A pulsing blue-green glow strobed rapidly along the full length of the weapon's barrel, increasing in intensity until no human eyes could watch it without suffering permanent injury. Three shots fired in rapid succession before

our shielded surveillance drones finally succumbed to the weapon's massive EMP backwash. By the looks of it, this weapon appears to throw a phased particle beam. I don't even want to estimate how much power eventually leaves that muzzle, but it's more than enough to ruin any poor Spacer's day.

This left no room for doubt in my mind. We are now entirely at the mercy of *Father of Tides*.

Speak of the Devil. Here he comes.

"*Where is Enemy, Father of Shells?*" He gestured abruptly. "*You tell this one now. We hunt. We kill.*"

I activated my dive suit's holo-emitter. Looks like it's time to bite the bullet.

"*Enemy seeds are growing where you cannot go. Enemy seeds awake in Dark Place. We cannot kill.*"

"*You show this one Enemy. We kill. All Enemy life will burn.*" *Father of Tides* signed emphatically.

"*We need deep life-stuff from Father of Tides. We make Enemy burn in the Dark Place.*"

Father of Tides swam closer. His face was less than two metres from mine. His expressions were well-nigh unreadable at the best of times, although it was a fair to say he was less than impressed.

"*Show this one Enemy. Now.*"

I took a small phial from one of my suit's harness pouches. A biological sample capsule.

"*Seeds of Enemy in here. Father of Tides make life-stuff to burn Enemy... Yes?*"

The Leviathan regarded me curiously, as if uncertain of my meaning. I raised the capsule slowly and held it in front of his face so that he could see it more clearly.

"*You make bubbles in this one's face, Father of Shells. There is no Enemy here.*" He gestured irritably.

Great. He thinks I'm yanking his chain.

Time for a change of approach. One wrong move at this point, and any surviving colonists would be scraping tiny flecks of Selkirk 2.0 off their filtration plant intake screens for the next decade. Moving as slowly as possible without making it appear suspicious, I removed the DNA transfuser from its holster. *Father of Tides* reacted instantly at the sight of it, bristling with barely-contained fury.

"*Talon from Dark Place. Make great pain. Father of Shells take life-stuff from this one? No!*"

I made calming signs of negation. "*Not talon... Eye. Eye to see deep life-stuff of all living things.*"

As luck would have it, a shoal of Spadefish cruised blithely through our tense little gathering. Taking care not to aim it at *Father of Tides* or any of the surrounding Warpers, I drew a bead on one of the fish and activated the transfuser. The Spadefish froze momentarily as the device scanned its DNA, then it continued on its way, unconcerned and completely unscathed.

According to the transfuser's raw info readout, the Spadefish's most outstanding features are excellent monocular depth perception and unusually palatable flesh. Not the sort of genetic attributes any sane person would want to acquire for themselves, but there you have it. Even so, that wee fishie has served its purpose by demonstrating that this device is indeed harmless. I used

my suit's holo-emitters to display some of its genetic features to *Father of Tides*, comparing them with images of comparable traits expressed in human DNA. Eventually, He appeared to get the basic idea behind the scanning process. However, *Father of Tides'* full DNA scan would have to wait, for now at least. I still need to get a physical sample of that enzyme.

No matter how respectfully I tried to express it, *Father of Tides* could not be persuaded to release any of the enzyme he carried. I have done my level best to convince Him that the Kharaa are a clear and present danger to all life on this planet, even at this early stage of their incursion. All to no avail. He continues to insist that there is no Enemy here.

Only one thing for it.

I retrieved the Kharaa sample container from its storage pouch. Slowly and deliberately, I crushed the phial in my right hand. An insignificant swirl of grey-green matter seeped from my clenched fist.

Stimulus. Response.

I conjured it would take quite some time before *Father of Tides* figured out what was happening. Exactly how long, I wasn't certain. IANTO's blue-sky estimate of twenty minutes seemed like a sod of a long time, particularly as I'd have to keep *Father of Tides* hanging around long enough for his enzyme production processes to kick in. Believe me, He's not the sort of chap you'd willingly annoy.

To pass the time more profitably, I continued talking with *Father of Tides*. Naturally, there's a finite limit to the amount of idle chatter one can successfully palm off on an entity this powerful. Even the Warperts were beginning to simmer down appreciably, their skins returning to almost normal coloration and patterning. However, there was a certain edginess about them that refused to settle.

"Tell this one of Sky Watcher, *Father of Tides*."

"Sky Watcher awakes, his talon of skyfire now seeking Enemy world-seeds from beyond sky."

"This one has seen no Enemy world-seeds. Only smallest seeds of Enemy, all found in Dark Place."

So, the Precursor cannon is specifically tasked with shooting down Kharaa spore ships, along with any other vessels suspected of harbouring the Kharaa contagion. Some folk might consider this a prime example of xenophobia taken to extremes, although it makes perfect sense when you're dealing with the Kharaa. Those bastards have already laid waste to most of the human-habitable planets in the Ariadne Arm, and it won't be too long before they're caught sniffing around the outermost Core Worlds. Definitely not an ideal time to consider signing on as a Frontiersman.

All the more reason to proceed with this extremely risky gambit. As well as a cure for the colonists, *Father of Tides'* enzyme is potentially the ultimate weapon against the Kharaa. From what little I already know of it, a weaponised form of this enzyme could be deployed from low orbit, entirely without risk to human lives. Although he never committed it to print, I'm fairly certain that Baat Torgal had been working toward this goal as well. Developing an effective cure for the Kharaa plague would have only been the first step. It's a fair bet that House Torgal wouldn't have been shy about accepting any lucrative military supply contracts, either. With *Father of Tides* safely locked away in the Lava Castle's containment facility, Torgaljin Corp held a monopoly on this planet's sole source of Enzyme 42.

Until I appeared on the scene, of course.

Time's up. The Wapers are showing the first signs of extreme agitation. Although the tiny amount of Kharaa pathogen contained in the phial has completely dispersed in the current, a sufficient concentration of organisms remained in the water around me, triggering specialised chemoreceptors in unknown organs or physical processes deep within the Wapers' bodies. Their skins abruptly turned black as the faint chemical signals spread rapidly among them.

Hunter-killer mode engaged.

Father of Tides roared deafeningly. The water around me shuddered with the full force of his fury. Obeying his command, the ring of Wapers surged forward as one, their talons raised for a lethal strike. Dismemberment and decapitation. An archaic, yet appropriate punishment for my crime. Treason most foul.

Father of Tides reared high above me. His expression could only be described as 'stern'. The Wapers had me completely boxed in by now, each one less than three metres away. Their talons poised, an unspoken threat simmering in the water around us.

"*You are Unclean.*" He gestured curtly. "*Enemy seeds are growing. We burn Enemy.*" He lunged forward, his jaws agape. I was totally unprepared for a viscous attack of this magnitude.

Aye, that damned stuff is stickier than activated epoxy resin. Wherever it hit, it most emphatically stuck. *Father of Tides* hosed me down from head to foot with a torrent of enzyme-laced mucus, covering my entire body with a thick layer of fluorescent yellow-green gunge. It was like being blasted by a high-pressure fire hose charged with warm library paste... Only slightly less enjoyable.

There was absolutely no malice in it. I received a distinct impression that he was treating me like a mucky wee pup who had rolled in something rather unsavoury. It's bath-time for Greyfriars Bobby.

Beneath my thick coating of goop, I grinned broadly. *You beauty. That's exactly what I wanted.*

Working quickly, I wrestled my backpack off and withdrew the first sample container, scraping its wide mouth along my left arm to collect the enzyme. I had sixteen one-litre containers in the pack, figuring that would be more than enough for this job. I might miss a few patches that I can't quite reach, but one of the crew would lend a hand when I finally returned to *Ulysses*.

It took more than half an hour to harvest the enzyme plastered all over me. I would have given a handful of diamonds for one of those sweat-scrapers ancient Romans used in lieu of soap. Yes, a *strigil* would have been mighty handy, but there's never a Roman bath-house around when you need one. Eventually, I looked less like a giant lime jelly-baby and more like a human-form android again. My dive suit's most likely a complete write-off by now, although I was pleased to note that the enzyme had not attacked my polymer-based skin. The Wapers had withdrawn to a less threatening distance, leaving *Father of Tides* to watch my strange antics with a kind of bemused interest.

"*You are Clean, Father of Shells. Swim free.*" He gestured solemnly.

Obviously, the word 'clean' only applies to my current pathogen-free status. Unless this gunk completely bio-degrades after a certain period of time, my suit is definitely history. Oh well, best to treat this minor mishap as another parameter in our scientific observation of this enzyme.

I cleared a particularly tenacious smudge of enzyme from the suit's holo-emitter lens. Warper is up.

"*The Lost Ones thank Father of Tides. His passing cleanses us all.*" I signed humbly.

This shamelessly borrowed accolade seemed to please Him no end. There were a few moments there that could have gone horribly pear-shaped, although He was quite gracious about this whole affair in the end. After exchanging farewells, the Warpers vanished as suddenly as they had appeared. His work done, *Father of Tides* turned slowly about, swimming off to wherever He called home. Just before He passed into the green gloom beyond, *Father of Tides* turned back and signed.

"*Speak with The Slow Ones. They have strongest life-stuff to burn Enemy. Much power. Swim free.*"

The Slow Ones. Gasopods? You're kidding.

Ten minutes later, I entered *Ulysses'* quarantine lock. Most of the uncollected enzyme had dissipated during the swim back, and what little residue remained was hardly worth collecting. That's one question answered, at least. As for the Gasopods, I'm fairly certain that I won't have to resort to florid speeches in order to get what we need from them. Even so, it might be worth exchanging a few words, if only to establish some sort of amiable rapport in future. Getting them to drop their gas pods is the easy part. You only have to swim close enough to make them feel sufficiently threatened. The rest comes rather naturally to them.

Unlike *Father of Tides*. It may have seemed that I pulled a dirty trick to get a sample of Enzyme 42, although it was more a case of supplying an appropriate stimulus to trigger His enzyme production. *Father of Tides* can't release the enzyme on command. There has to be an actual need for it to be secreted. Simple biology.

Yes, it could have gone horribly wrong. That was a risk I was fully prepared to take. Had events progressed beyond my ability to control them, the colonists would have been safe from almost anything *Father of Tides* mustered to throw against them. Even Rock Punchers.

After activating the tau-muon field salvaged from the Lava Castle, *Kaori-san no-shima* would be completely immune to Warper attacks. In a genuine worst-case scenario, this would have been the opening move in the colony's defence strategy. Next, all repulsion cannons would come online in full MARTIAL mode. Anything that doesn't transmit the correct IFF squawk instantly becomes a drifting cloud of organic matter. Should events escalate beyond that point, JUNO will send in the ExoSuits. There are sufficient materials stored the base to manufacture as many units as may be necessary to complete the mission. Fabricator gantries in each of the base's six moon pools can pump out a combat-ready Mk. V ExoSuit every 45 seconds, and each one will come out fighting.

Believe it.

If all else fails, there are four *Cyclops*-class submarines poised to sweep every living thing from the ocean with TRIDENT sonar arrays. Peace will reign once more; albeit one bought at a terrible cost.

This is the sort of thing you never want to think about, even as a hypothetical exercise. However, this is the harsh reality humanity must face as it walks under alien skies. Even the faintest whiff of danger cannot pass unheeded. Every possible contingency must be addressed before we can permit ourselves the luxury of feeling (relatively) secure. Even then, there are no absolute guarantees.

"Decontamination cycle complete, Captain. Welcome aboard." IANTO said.

I opened the airlock hatch and stepped into the cramped laboratory module. JUNO looked up briefly and nodded a curt greeting, then returned her gaze to the micro-scanner's holographic display.

"So, how did your meeting with *Father of Tides* go, Sir?" IANTO grinned.

"You know bloody-well how it went, you great numpty. He slimed me." I muttered sourly, handing him the backpack full of enzyme samples. "And on that distasteful note... Egon, your mucus."

"Excellent work, Sir. I shall commence fabricating the dermal patches and IV solutions immediately."

"Good man. I'll drop them off with DIGBY before catching some downtime. I need a wee break."

The base was eerily quiet. Instead of the usual background hum of conversation and colonists going about their daily affairs, I was greeted by an almost palpable sensation of fear and desolation upon entering the base's central corridor. According to JUNO and IANTO's estimates, more than 95 per cent of the colonists would be infected by now, and it wouldn't be long before the earliest cases started to exhibit Stage Two symptoms. This is the point where the Kharaa plague definitely makes its presence known. You can't write off oozing open sores as a 'moderately severe' allergic reaction.

IANTO's first batch of treatment derms and IV solution packs are safely in hand. The fabrication process had taken slightly longer than anticipated, but as IANTO pointed out, some things are best not hurried. My greatest worry is that the fabrication process would somehow alter or deactivate the enzyme. However, results from the first sequence of *in vitro* trials indicated that the enzyme would remain stable long enough for its full effect to be brought to bear on the virus. The treatment regime IANTO had devised lasted a week in total, since the dosages had to be scaled down to accommodate human physiology, most particularly in the case of immune-suppressed patients. It's a delicate business. We can't simply drench folks in Enzyme 42 and congratulate ourselves on a job well done. That virus is busily subverting human DNA every second that it's in a human body. The real trick is to destroy the virus without harming the patient. With a curative agent as potent as this, a fine balance has to be maintained.

At first, I thought that the Bridge was completely deserted. Only the sound of air-circulation fans and a subdued hum of operating hardware filled the air. On entering the module, I found Enzo Savini slumped over his console; alive, but barely conscious. Obviously, the poor bugger had doggedly remained at his post while his mates dropped like flies around him.

I activated my commlink. "DIGBY, bring a gurney to the Bridge, stat. Got another patient for you."

"On my way, Sir." DIGBY responded.

I couldn't help but feel sympathy for this particular chap. During our first meeting, I remember bawling him out for his apparently slipshod approach to the job. Now, I find him like this. That's a

guy who knows how to make a smart about-turn. I opened the insulated storm-case containing the Enzyme 42 derms and withdrew one. After swabbing the skin on his upper arm with an isopropyl alcohol wipe, I attached the transdermal treatment patch and waited for DIGBY to arrive.

Forty-five seconds later, DIGBY arrived. I gave him a hand transferring Enzo to the gurney, then stepped back while he ran a medical scanner over Enzo's whole body.

"I'm afraid he's in moderately poor shape, Sir. Still in Stage One, thankfully. As you can see from the medi-scanner readings, the Enzyme 42 dermal patch is already taking effect, although he will still need to undertake a full course of treatment before he is considered fit to return to duty."

I grinned. "Not a problem. As far as I'm concerned, Enzo can spend a whole month convalescing in *Margaritaville* when he's back on his feet again. He's done a real job of work here today, hanging on as long as he did... Pity Alterra's a civilian outfit, and I'm only a pretend Captain. That's definitely worth a field promotion."

DIGBY smiled warmly. "I beg to differ, Captain. There is nothing 'pretend' about your command methods. You are indeed worthy of that title. It is our distinct pleasure to be serving at your side."

"I'm just lucky to have scored a damn fine crew. If it wasn't for you three, I honestly wouldn't have survived the first time around. There's a distinct probability I would have gone completely barmy within the first six months." I admitted.

"Again, I would respectfully have to disagree, Sir. You are mentally stronger than you are prepared to admit. While your command style is somewhat... *unorthodox*, you have constantly demonstrated a commendable degree of competence, particularly when confronted by some of the most unusual circumstances ever faced by a single human. You have our complete confidence, Captain."

I chuckled uncomfortably. "Och, awa' with ye, man. I'm fair fit to start blushing."

DIGBY finished prepping Enzo for transit to the Med Bay. If conditions are as bad as JUNO's projections said they'd be, a pair of extra hands would be mighty welcome. Downtime can wait.

"DIGBY, I'll need a current readout of the colony's medical status. If you need assistance, I can start by administering the initial doses. Incidentally, how many med-techs are still on their feet?"

"None, Sir." DIGBY replied gravely. "The infection rate progressed more rapidly among the colony's medical staff, in spite of having stringent infection control methods in place. The causative organism is exceptionally virulent, as you are undoubtedly aware."

I nodded. "Aye. Now's as good a time as any to start. Since there's a stability issue with the raw enzyme, I can't spare JUNO or IANTO at the moment. Our best bet is to get all of the colonists on the treatment as quickly as possible. Keep me apprised of the situation as it develops."

"Very well, Sir. As soon as I have Mister Savini's condition stabilised, I'll be joining you. I strongly advise that you commence treating all potential Stage Two patients first. I've just transmitted the correct procedure for administering and calibrating IV medications to your active file system, so you shouldn't have any difficulty performing this operation."

"Good catch, DIGBY. I was hoping to download a full medical and biochemistry skill-set during my next scheduled offline period, but this should be enough info to be going on with. I'll see you later."

Although my natural reaction was to check on Héloïse's condition first, the brutal logic of triage overruled that decision. I haven't seen or spoken to her at all during the past 48 hours. According to DIGBY's readout, she collapsed approximately six hours ago. Early-stage infection and sheer fatigue simply knocked the legs out from under her. From what I can gather, she was assisting the remaining Med Techs when it happened. She had already been on deck for at least eighteen hours straight before keeling over. Fell without uttering a single word of complaint. No surprises there.

All infected colonists have been made as comfortable as possible. Before we had access to the enzyme, the only treatments the crew could provide were painkillers and heavy sedation. Cryostasis appears to have no appreciable effect on the Kharaa virus, indicating that it possesses some truly frightening properties. It continues to function, even at temperatures close to zero degrees Kelvin. Engineered for deep-space survival. Even so, the crew and I are about to kick that infernal bug squarely in the fork. As soon as the colonists are safe, I'm going to look into what the Gasopods can offer. Their version of Enzyme 42 is incredibly toxic to human physiology, but it might be just the ticket for destroying Kharaa infestations on a planetary scale. Time for some pest control. *Brutal.*

Right now, the colonists are my paramount concern. As I made my nursing rounds, I took particular care to spend some honest face-time with each of them. The treatment itself took but a handful of seconds to administer, so I was able to address their individual concerns and outright fears at some length. Fortunately, I am able to offer far more than mere words of reassurance this time around.

The problem of Polyakov and Co. may have been put aside for a while, but it is far from forgotten. At some point, I'm going to have to retrieve them from the Lava Castle and make more permanent arrangements for them in *Kaori-san no-shima*. If it were entirely safe to do so, I'd happily leave them all to rot down there. However, each one of them is a potential time-bomb. My plan is to saturate the atmosphere of the entire facility with an Enzyme 42 aerosol, and since I'll be using the Gasopod toxin, I'll have to remove Polyakov and his mates first. Yes, I know this all sounds far too lenient, but I'll be damned if I'll leave them there to be digested by that stuff. I know how Gasopod cytotoxin works from first-hand experience, and I wouldn't wish that horrific death on anyone.

Even Polyakov.

Our prisoners will need to be revived from cryostasis, or the treatment simply won't work. The Kharaa virus is still active inside their bodies, perfectly capable of transmission to any living organism that comes into contact with them. Thawing them out and treating the infection is the only way to ensure that we obliterate every last skerrick of the Kharaa before leaving *Manannán*. If I read *Father of Tides* correctly, *Sky Watcher* and his cannon will blow *Borealis* out of the sky if even the slightest taint of Kharaa contamination is detected. I have already tried to prise the details of how *Sky Watcher* detects Kharaa contamination from *Father of Tides*, but it's plain that he has almost no understanding of Precursor technology. "*Sky Watcher smells Enemy. Burns them with sky-fire.*"

I'm guessing there's one Hell of a sensor suite at *Sky Watcher*'s virtual fingertips. That's something I'd love to hand over to the TSF, along with synthetic versions of Enzyme 42 and its more potent Gasopod variant. Better yet, Alterra isn't going to get a single Credit from this deal. As far as I'm

concerned, Alterra lost me completely when I found out about the STARFISH mining rig. If this makes life any easier for the Frontiersmen, I'm going to move heaven and earth to make certain it happens.

All in good time. For now, I have more than enough on my plate. Every day that isn't spent building *Borealis* brings us one day closer to hurricane season. Three months from now, the *Argus* satellite constellation will definitely be earning its keep. More delays are inevitable, but construction should be back on track in no time. If needs be, I can always build more construction drones and step up the pace a wee bit. If we can get most of the load-bearing assemblies secured in place before the weather turns rotten, nearly everything else can be completed underwater. The construction dock is designed with this particular contingency firmly in mind.

A week later, I found myself loitering about the shallows. From what I can determine, Gasopods communicate with a limited range of vocalisations. Try as I might, I found no clear meanings for any of their various grunts and squeaks. While it may have been possible to camouflage myself as a Gasopod, our conversation wouldn't have been terribly productive. I used the Warper image. As soon as I swam up to greet the herd, they panicked, instantly unleashing a blizzard of toxic gas pods.

"*Speak with The Slow Ones.*" Hmm... Looks like *Father of Tides* has developed a sense of humour.

Straight off the top of my head, there are at least 127 other things I'd rather be doing now.

Harvesting Gasopod farts is not one of them.

Yes, I know they're not technically farts as such, although their chemical composition has certain similarities with the old-fashioned 'trouser cough' that we all know and love. Admittedly, the presence of fluorine and bromine came as a bit of a surprise, although it's easy to see how these elements have earned their place in that vicious hell-brew. The fluorine component of the cloud is converted into highly corrosive hydrofluoric acid upon contact with seawater, using an as-yet unknown catalytic process. Bromine is a powerful sanitising agent, making the emissions of these creatures something to be rightly avoided by any organism carrying the Kharaa virus. Even if you're not infected, swimming into a cloud of freshly-released Gasopod toxin is a *really* bad idea.

I discovered this fact very early in my stay on *Manannán*, inspiring an understandably healthy respect for Gasopods. Upon realising the gas-pod's potential as a weapon, I attempted to harvest some with a propulsion cannon's gravity snare, intending to use them as projectiles. It didn't take too many attempts before I gave this up as a particularly unwise notion. For a start, those pods are highly sensitive to hydrostatic pressure changes. If they rise or fall more than half a metre in the water, their walls will instantly rupture. You can probably guess what happens if you bring one of these pods into your base. Not pretty at all. And yes, I found this out the hard way.

Bearing that in mind, I whipped up a simple 'slurp-gun' to harvest the toxic cloud that they produced. Not much more to it than a metre-long tube containing a couple of axial compressors scavenged from airline tube segments, a membrane filter cartridge to remove seawater and a toxin holding tank. It's probably the safest way of doing it, all things considered.

It's far too easy to discount Gasopods as grotesque, slow and clumsy freaks of nature. However, I now believe that they occupy a far more important niche in *Manannán*'s ecology. Their natural

habitat is the Shallow Reef biome, and they are ideally suited to conditions in these protected areas. Their natural defence mechanism mainly serves to deter the incursion of larger predators such as Stalkers and Sand Sharks, incidentally creating a haven for food fish species to spawn and grow in relative safety. In regard to their role in this planet's ongoing war against the Kharaa, they are well equipped to sanitise the shallows quickly and effectively during an early infestation. If Warpers could be considered the fighter pilots in this conflict, Gasopods are definitely the bomber jockeys. Disrespect them at your own peril.

I'll say this for Gasopods; there's no apparent limit to the amount of toxin that each one can produce and release. My first five-litre sample container reached its full capacity after only two minutes, so I was able to complete the task with a minimum of disruption to their otherwise placid routine. I conjure these creatures warrant much further investigation, particularly from a behavioural viewpoint. There's an intelligence of sorts at work there. If there's any way of establishing a two-way dialogue, both parties may benefit from an amiable working partnership. Naturally, we'll attempt to synthesize the toxin if it's possible to do so, although getting it straight from the source is an acceptable alternative. The process of generating toxin doesn't appear to cause them any distress at all, although I'm sure that they would appreciate the gesture if we asked them nicely first. Given the Kharaa presence spreading through this sector of the galaxy, we're going to need all of the allies we can muster. Practically all life on *Manannán* has been engineered for this exact purpose.

When I returned to *Ulysses*, I thought it wise to take two full decontamination cycles before entering the lab. Although I tried to stay up-current as far as possible while sampling the Gasopod toxin, there was still an unholy stench hanging about me. According to my olfactory sensors, the toxin is loaded with mercaptans; charming little organo-sulfur compounds that impart the delicate fragrance of garlic, ranky old socks and rotten eggs to one's personal ambience. Even at a concentration of 150 parts per million, the smell was enough to make anyone want to punch out a Reaper. If this stretches my credibility beyond breaking point, bear in mind that the average human nose can detect butyl mercaptans at a concentration of 10 parts per *billion*. One might say that I was positively honking before doubling up on the old wash, rinse and spin-dry. Lovely.

I was planning to visit Héloise sometime later this evening. Love may be blind, but its sense of smell is in perfect working order. Something tells me that a dab of manly cologne won't be nearly enough.

JUNO and IANTO were still hard at work making the current batch of Enzyme 42 treatment derms and IV solutions, concurrent with their research on a synthetic version for mass production throughout human-occupied space. IANTO sniffed audibly as I entered the cramped lab module.

"Howay, troops! I have returned from the *Bog of Eternal Stench*, bearing gifts for all!" I crowed.

"That much is painfully obvious, Captain." JUNO said primly. "With all due respect, Sir, I strongly recommend that you repeat another two full decontamination cycles before leaving."

"That's a bit harsh, lass." I said defensively, "I'm registering a concentration of less than 0.5 parts per billion... Well below the olfactory threshold for humans. Still, if your pals won't tell you when you're a bit on the nose, they're no' your real pals. Consider it done."

It really was *that* bad. If we were going to use an aerosol version of the Gasopod toxin to disinfect the colony and Lava Castle base, something would have to be done about that horrible, all-pervading

smell. It completely transcended 'annoying' and went straight to 'infuriating' without skipping a beat. Not too many folks give the myriad scents of life more than a second's thought, beyond what constitutes a 'good' or 'bad' smell. In fact, odours can exert a powerful influence over the human mind, typically triggering some sort of emotional response at an entirely unconscious level. If you ever want to recall a cherished lost memory, try smelling something associated with a specific life event. Believe me, it works. These minute details might seem trivial to the casual observer, although I assure you that my concerns about the toxin's smell are serious and entirely well-founded.

Most of the colonists have effectively reached their utmost emotional limits. Even the slightest irritant, whether it be social or environmental, could easily trigger an uncontrollable outbreak of violence. Some of them are now well enough to be getting up and about for short periods, and they are all fully aware of Polyakov's role in unleashing this epidemic. It wouldn't have taken anyone too long to join up the dots. Suffice it to say, the general mood around *Kaori-san no-shima* is rather less than amiable at the moment. There's a definite undercurrent of anger in the air, something that can't be cleared up with another jolly *ceilidh* and a stirring, tear-streaked chorus of '*Auld Lang Syne*'. Judging by some of the conversations I've been hearing lately, nothing short of feeding Polyakov and the Blue Meanies to a shoal of starving Biters would suffice. On that cheery note, I'd best be getting back to the colony and see what I can do to avert this situation. At the heart of it, they're good folks in there. I'd rather not see them all dragged down to Polyakov's level.

Héloise was wide awake when I entered the recovery ward. As I approached, she drew back the covers and unsteadily attempted to scramble out of bed. I waved a cautioning finger at her.

"You stay right there, milady." I said sternly. "You've been through a particularly rough patch lately, so you'd best take a quiet spell. Besides, it's not like there's anything happening at the moment."

"I'm bored, my dear Captain." Héloise pouted. "I want to go swimming with sea dragons again."

I smiled, gently taking her hand. "You and me both, love. However, you've still got some ways to go, and I won't let you burn yourself out again. DIGBY told me about the state he found you in, and I thoroughly agree with his decision to keep you bedded down for at least another 48 hours."

She smiled archly. "But not engaged in any activities that might be considered too *strenuous*... Pfui."

I chuckled. "Later, dear heart. In the meantime, is there anything else that I can do or get for you?"

Héloise nodded decisively. "A drink. I would like one of your *Beached Reaper* cocktails. Topside."

I frowned, albeit half-seriously.

"Not certain that's entirely a good idea, lass. However, as your consulting physician, there may be some therapeutic benefit to be gained from fresh air, sensory stimuli and a prudent measure of alcohol to put some colour back in your lovely cheeks. I shall consult with my learned colleagues."

Héloise eagerly wriggled herself into a sitting position, her upper body supported by a couple of extra pillows. There was a brief wordless interlude while I conferred with JUNO, IANTO and DIGBY. She regarded me with an almost childlike expression; something halfway between mock petulance and genuine expectancy. Actually, it would be perfectly fine to take her topside for a breath of fresh air, although there was a question mark hanging over the wee nippie that she fancied. There was no

apparent data regarding adverse interactions involving Enzyme 42 and alcohol, so a certain degree of moderation is called for here.

Héloise had protested when I returned to the ward with a wheelchair, although her first attempt at standing unassisted ultimately convinced her of its utility. A precautionary scan I'd taken revealed a number of small lesions along her spinal cord. Nothing too serious and well on the way to healing completely, although their residual effects were immediately obvious. She would be wobbly on her feet for at least another week or so.

Margaritaville was a welcome relief for both of us. However, I made the mistake of bringing up a particularly sore point halfway through an otherwise pleasant discussion. Idiot.

"You're not serious, surely?" Héloise said icily. "Bringing Polyakov back here would be a disaster."

"I am. I need to treat the infection that he and his team are carrying, otherwise the planet will never be free of the Kharaa plague. There is also an urgent need to decontaminate the Lava Castle base, and there's no way of doing that without killing them all. Their cryostasis pods will definitely malfunction when they're exposed to the Gasopod cytotoxin. It's an insanely powerful brew of chemicals."

Héloise leaned forward, her expression furious. "Not a problem, *Chérie*. Let them rot down there."

She was absolutely right. *Gorram it*.

Even under a maximum security lockdown, Polyakov and Co. are a total liability. I briefly considered sending them all to *Skull Island*; most fitting company for the other toxic wastes we store there. That would surely end well. Mining explosives and fissionable materials do not play nicely together. He wouldn't have to do an Oppenheimer to get his own back, either. Ten tonnes of MDX would make a tidy bang, and when you throw in a few tonnes of viciously hot isotopes, life will become particularly uncomfortable for all parties concerned. I wouldn't put it past the bastard to use a dirty bomb against *Kaori-san no-shima*, either. After all, he had few qualms about fielding a Level V biological weapon against us. That settles it. Appropriate or not, *Skull Island* is definitely off the table. Permanently.

It has to be *Kaori-san no-shima*. Now all I have to do is convince Héloise and the other committee members that this is the right decision. That's going to be a full-time job in itself. Once the colonists find out that Polyakov and his team are back onboard, it's going to be flaming torches and pitchforks all round... Although it's more like magnesium flares and repulsion cannons in this case.

"Look, love. As far as I'm concerned, Polyakov has already used up all of his mulligans in one go. We can't leave them down there. Sooner or later, those cryopods will malfunction on their own accord. When those men start to thaw, the Kharaa virus will convert their tissues into a biomass capable of pumping out a *tsunami* of combat-ready Kharaa predators. Sure, they'll be confined to the Lava Castle for a short while, but that won't stop them. They'll adapt to aquatic life inside a couple of generations, and there's nothing on this planet that can fight them out of water, except Rock Punchers. Maybe. They simply won't be enough to stem the invasion. It's all up to us."

Héloise shuddered visibly. I wasn't certain if her mind's eye saw the inevitable outcome of this scenario, or her body recalled that fleeting contact with the Kharaa organism. There was something primal and obscene about the Kharaa; nightmare creatures springing from living flesh, a flesh still dimly aware of being consumed. Thankfully, we have found a way to avoid those final moments of horror. If we had failed to discover the curative enzyme, I already have a contingency plan in place to spare the colonists from a truly miserable end. Not even Héloise knows about it. At the heart of the station, a nuclear dragon sleeps. When it finally wakes, I will burn with everyone else. Even now, the decision to incinerate *Kaori-san no-shima* still haunts me.

"Where are you going to keep them?" Héloise asked eventually. "Just knowing that he's alive would be enough to drive everyone here insane with rage. I trust you with all my heart, but the others will not understand why you are doing this thing... At least let me talk with them first."

I felt I was now treading slightly firmer ground with Héloise, much to my relief. There were some awful moments back there when she let the chain slip on her inner Guardian, and I wouldn't want to be standing between her and Polyakov when the last link ran out.

"I plan to lock them away in the Security complex. After making a few minor changes to their living arrangements, of course. Once JUNO and IANTO have prepared the decontamination compounds, I'll collect those ratbags from the Lava Castle and bang them all up tighter than a Peeper's freckle."

Héloise smiled grimly. "*Bon*. I'm coming with you."

A week later, still no joy on adapting the Gasopod cytotoxin to a more user-friendly version. JUNO and IANTO had successfully stripped away most of the more questionable compounds, although there were still serious issues with its extremely corrosive nature. Still, progress is being made. Rather than sit idly on my hands, I created a modified version of the Mk. V ExoSuit, specifically designed as a tactical delivery system.

The new ExoSuits *Pasteur* and *Jenner* are hulking great brutes. A *Cyclops* can only carry two of them, owing to the bulk of their integral chemical storage tanks. With a total capacity of 2,500 litres in mind, I had to juggle the suit's weight distribution specs considerably before accepting the final prototype design. There's not much point in building a bipedal mech if its first reaction is to pitch forward and face-plant. By the time I had finished tweaking this variant's design parameters, it was almost as agile as a Mk. V, although its top movement speed has been reduced by 50 per cent. Since we aren't planning to beat a hasty retreat anytime soon, I can live with those figures. Besides, the mere sight of one of these things would give a Kharaa Onos a severe case of the runs.

These suits are definitely not pretty. You know how a standard ExoSuit looks a wee bit spindly and a touch top-heavy? Not these nasty buggers. They've been spending some serious time at the gym, and quite possibly dabbling with some naughty chemicals as well. *Tsk-tsk*.

Anyway, I am rather satisfied with the end result. As well as the standard Mk. V's Gauss cannons, the suits also carried twin plasma flamers and cytotoxin sprayers. Two high pressure spray nozzles are mounted in the suit's fist turrets, and there's an array of aerosol dispersion jets arranged at strategic points over the suit's hull. Aside from disinfecting a wide area while on the move, the mist system will also take care of anything attempting to engage the suits in close combat. Of course, there's only a very slight probability of encountering any actual Kharaa life forms while we're in the

Lava Castle, but that's why I've gone all-out to ensure that absolutely nothing escapes from there. No matter how remote, probabilities have a sneaky way of biting you on the arse. Best to go in fully prepared for the worst.

The breakthrough came two days later. JUNO and IANTO have refined the cytotoxin's chemical structure to make it relatively harmless to human beings and native life forms, while retaining its full potency as an anti-Kharaa agent. When I say 'relatively harmless', I definitely mean it. Any human exposed to a heavy concentration of this aerosol would still become deathly ill, but at least they wouldn't melt into a puddle of goo afterwards. Its residual effects are drastically limited as a result of this tinkering, although that is ultimately a desirable outcome. This compound wouldn't be much use if no-one could use a habitat after decontamination. Seventy-two hours is an acceptable waiting period, although it's going to involve a bit of a juggling act at *Kaori-san no-shima*. The colonists can move into *The Broch* until we've sanitised it, then wait it out until their own quarters are ready for re-occupation. There's more than enough room to house them, although the level of accommodation drops a few stars from what they've become accustomed to.

The next day, *Taranis*, *Red Dragon* and *Aegis* set sail from *The Broch*. Héloïse and I were piloting *Pasteur* and *Jenner* for this sortie, although we had to make the entire trip seated inside the ExoSuits. They are simply too large to board in the usual fashion while secured aboard a *Cyclops*, so we were obliged to 'suit up' before embarking.

The Doctors will be with you shortly.

Six ExoSuits rose slowly on the sub pen's freight elevator, breaking surface quietly. Call it a vestigial response if you want, but there was no denying the sensation of hairs rising on the back of my neck. To be honest, we weren't expecting any opposition on this side of the airlock. The other side, well...

As far as we knew, Polyakov and his thugs are still deep in cryostasis. After several previous attempts at setting up remote telemetry in the Lava Castle, I figured that boots on the ground are the only effective method of keeping an eye on this installation. Something out there was hunting down our recon drones and destroying the telemetry repeater stations faster than they could be replaced. My money is firmly on the Crabsquids, although I'm fairly certain that Lava Lizards might have also taken a serious dislike to our equipment. What few pieces we've found were comprehensively trashed, so either party could be the likely culprit. No great loss. The whole relay system was tenuous at best, in spite of being thoroughly EMP-hardened and armoured for working at extreme depth. Ingenuity always finds a way.

We're sending a small swarm of drones in first to scout ahead. To make detection slightly more difficult, they're disguised as Blood Crawler hatchlings. IANTO put a lot of time into refining their mimicry subroutines. As a result, they're practically indistinguishable from the real thing. Of course, they'll probably be attacked immediately by any Kharaa organisms in there (if any), although there's a decent payload of Gasopod cytotoxin inside each drone to give them a particularly nasty taste. That's just a contingency measure, of course. Sending in an entire army of drones loaded with the toxin might sound appealing to your average armchair warrior, although it's a haphazard and ultimately impractical means of dealing with a Kharaa infestation. This has to be a thoroughly targeted operation. There's no room for shortcuts, particularly when we're dealing with Baat Torgal's old research facility. Not looking forward to that one at all.

Once we were clear of the elevator, *Aegis* surfaced and extended a retractable boom carrying the replenishment hoses for *Pasteur* and *Jenner's* cytotoxin tanks. There are an additional 20,000 litres aboard *Aegis*, so there isn't much chance of running out of bug spray before the job is done. As soon as we have The Goon Squad safely aboard *Red Dragon*, we'll be able to couple transfer hoses directly to the base's primary atmospheric processors. That should take care of any airborne contaminants.

Six ExoSuits, six cryostasis transfer capsules. Our general plan is to evacuate the prisoners first, then unleash Hell upon every living organism inside the Lava Castle. By the time we're done here, the virus won't even have two protein strands to rub together. Consider this exercise as an extreme clinical trial of synthetic Enzyme 42.

I stared at the drone video feed in dismay. The Kharaa biofilm had erupted in great patches, covering every available surface inside the base. Its glistening grey-green taint was unmistakable. DIGBY had last inspected the base only two weeks ago and reported it as relatively clean. Significant atmospheric contamination had been detected throughout the base, although there wasn't much we could do about it back then. All of this has happened in the space of two weeks. Gorram, that's downright scary.

"IANTO, what d'you reckon happened here? - There's no way there's enough nutrients in the Lava Castle to trigger a growth surge like this. See what data you can pick up once we're inside, mate."

"Affirmative, Captain. My best guess is that the biofilm metabolised any materials it encountered."

Drone *DELTA* moved cautiously, keeping to the shadows. It was heading for the Lava Castle's main medical bay, tasked with providing an advance assessment of the situation in there. The drone's spindly legs moved slowly but surely over a dense carpet of Kharaa biofilm, its proximity sensors alert for any threats lurking unseen in the pools of darkness ahead. Emergency lighting modules set into the central corridor's walls at sparse intervals emitted a feeble blue-white glow, achieving little more than making the surrounding darkness visible.

"Captain, *DELTA* is currently 50 metres south of the Med Bay. Biofilm density is increasing commensurately with closer proximity to this location. I suspect that this drone may have located a focal point of the Kharaa contamination. Unfortunately, this does not bode at all well for our prisoners. What are your orders, Sir?"

"Roger that, IANTO. Our first priority is to secure the atmospheric processing facility and commence decontamination. As soon as the airlock opens, *Jenner* and *Pasteur* will begin clearing a path through the worst of that biofilm. Once we're in place, DIGBY, JUNO and *Gawain* will head to the reactor room and see what can be done to get power back online in there. Even if it involves running a bloody extension cord back to the atmo plant. Whatever can be accomplished in the shortest possible time with minimal personal risk. Stay sharp, and don't take any chances. All set?"

Depressurisation cycle complete. The airlock doors slid open slowly, scraping off dense sheets of Kharaa biofilm as they retracted. The fragments fell with an obscene slithering, slopping sound, like entrails falling onto an abattoir's gutting table. We advanced cautiously, spread out in a vee-formation across the wide corridor. Héloise was clearly repulsed by the scene before her, although her over-riding expression is one of grim resolve.

"You certain you're okay, lass? We can take it from here, if you're not feeling up to it."

"*Oui*. I am perfectly fine, Alexander. I have seen worse than this." She replied. "Polyakov's work."

"All the more reason for you to avoid seeing what might lay ahead. You're certainly no shrinking violet, and for that I'm eternally grateful... Although you're still not quite one hundred per cent recovered from your illness. I'm only trying to spare you from the worst of it, that's all."

Héloise grinned ferociously, bunching *Pasteur's* right manipulator into a fist the size of a beach ball. Without warning, she whirled around and slammed it into a wall corner, sending a spray of basalt shards flying. *Okay. That's one way to make your point.*

"*Trés galant, ma Cher*. However, I can still protect myself... As you can plainly see."

"Just making sure, Dear Heart. Not that there was ever any doubt, of course." I said hastily.

Jenner's left foot skidded nastily as it set down, although the suit's gyros compensated in time.

"Whoa. This biofilm's getting a wee bit tricky to walk on. I conjure now's as good a time as any to start misting. All units, MARTIAL protocol is enabled. Weapons hot. Héloise, set the flow-rate to one litre per minute and activate your suit's jets. Let's start clearing this crap out from underfoot."

"Affirmative, my dear Captain. I am at your command. *Allons-y!*"

The latest news from drone DELTA is not good. Nine kinds of absolutely bloody terrible, in fact.

Med Bay is well and truly compromised. Worse still, it contains a living Kharaa hive. Fully functional. I only hope that the isolation chamber's biosecurity seals are still holding. If they have failed, Polyakov and his men are beyond all possible help, earthly or otherwise. Without power to activate the Med Bay's bulkhead doors, it is impossible to get DELTA into a better viewing position. Even so, the view afforded by the general ward's outer enamelled glass walls is more than enough to confirm my darkest fears.

IANTO's initial analysis of the biofilm was right on the money. Every surface in the Lava Castle is being actively exploited by the organism. At a microscopic level, there is already sufficient organic material in here to support a modest-sized Kharaa infestation. Skin flakes, human hair, food particles and waste products shed over the span of a century gave it the vital kick start it needed, and once the biofilm had expanded over a sufficiently large surface area, it was able to commence drawing nutrients from considerably less productive sources. There was also a reaction similar to photosynthesis taking place in the colony, although decreased light levels would make this a poor source of energy in comparison to everything else it could consume. Metals, polymers... Even rock. Though meagre fare at best, the basalt of the Lava Castle itself was not immune to the rapacious hunger of the Kharaa communal organism.

Each new revelation about this Kharaa infestation made my spirits sink even lower. There is an extremely high probability that this mission could go badly for us. Five of us pitted against a planet-killing organism that knew no pity, no remorse. It functions as a cohesive whole; the very model of an organic machine honed by millennia of vicious total warfare and relentless conquest. On our side of the ledger, I have the highest possible faith in my crew. Héloise is a warrior born and bred,

exceptionally skilled in a dazzling combat style unmatched by anything I've seen in two lifetimes. If it comes down to making our final stand, we will all go down fighting. One way or the other, it all ends here.

Hoka-hey! Today is a good day to die!

More to the point, it is a perfectly splendid day for something else to die. The Kharaa.

We reached the atmospheric processing plant without incident. I noted with great satisfaction that the Gasopod cytotoxin was dispatching the biofilm with surprising speed. After only five minutes of contact time with the aerosol, the way behind us was a seething, bubbling mass of decaying corruption. The effect was similar to spraying acetone onto a solid block of polystyrene, only far more dramatic. Polystyrene doesn't writhe in agony as its molecular structure is being torn apart.

Working quickly, I coupled a transfer hose to *Pasteur's* main storage tank, then opened the required sequence of valves to inject the liquid directly into the base's air circulation units. Although she was effectively chained to the air treatment system for the duration of this process, Héloïse would be relatively safer in here for the time being. According to my calculations, only 500 litres of cytotoxin would be needed to fumigate the entire base, leaving her with slightly less than 1,800 litres onboard for '*direct application*', as it were. Still more than enough to go round, I'd reckon.

Time for your medicine, Beasties. Open wide, and say AAAAARRRRGGGH!

"Sir, we have reached the reactor control room. The facility still appears to be entirely secure."

"Okay, JUNO. Take a gander at the control systems and make your assessment. If needs be, I can telepresence through *Gawain* to make any major repairs that might be necessary. Selkirk out."

Ten minutes later, JUNO responded.

"Data logs indicate that the fusion reactor automatically scrammed 12 days, 4.20 hours ago, Sir. A number of critical power transfer conduits, relays and distribution nodes have been damaged by the biofilm's corrosive action, triggering an automatic shutdown of the reactor. The colony's geothermal exchangers are still online and fully operational, although they are currently isolated from the grid, presumably as a result of similar damage to their own distribution network. How shall we proceed, Sir?"

I sucked air between my teeth pensively. Most definitely a three-cup problem. The obvious solution is to run a temporary high-tension power cable from the generator's switchgear to the atmospheric processing plant. However, there was no telling how long that cable would last once the biofilm started eating into its outer sheathing. I need something biologically and chemically inert to use as internal and external insulation. Ordinary polymers simply wouldn't work.

"Okay JUNO, your team will need to go on a scavenger hunt for this one. We're looking for something fairly old and exotic... PTFE. Used to be called 'Teflon'. With any luck, you should be able to find some fluorocarbon refrigerant or other chemical precursors close to your current location. Use your Builder tools to scrap anything useful that you find. Unfortunately, we'll have to settle for using copper conductors in the wiring rather than graphene nanotubes, purely because the clock's ticking. Mind lass, this cable's a bit special... I'm sending you the fabrication specs right now."

"Data packet received, Sir. JUNO, out."

In the meantime, I dived into *Gawain's* onboard AI and took a closer look at the colony's electrical switchgear. All pretty much standard tech for a large installation such as this, by the look of it. There wasn't much point in restarting any of the fusion reactors, since we'd need to use the geothermal plant's output to jump-start the fusion reaction anyway. Cold-booting a reactor is a lengthy and extremely precise procedure; not exactly the sort of thing you'd willingly attempt during a search and destroy mission. Not if you expected to live through that mission, at any rate.

JUNO and DIGBY returned three-quarters of an hour later, lugging a large cable spool between them. One hundred and fifty metres away, *Gawain* was connecting its end of the 75 millimetre-diameter cable to a set of terminals in the main distribution board. As soon as I have finished making the connections to the atmo plant, *Gawain* will reset the breakers and send the juice down our way. If all goes according to plan, things should become extremely lively in here not too long afterwards.

"All units, set Condition Red. Weapons free. Atmo plant will come online in fifteen seconds."

At my command, *Gawain* activated the circuit. I held the ExoSuit there long enough to verify that the connections were sound, then recalled it at the double. As soon as *Gawain* rejoined formation, I activated the atmospheric processors. Massive circulation fans whirled into life throughout the complex, filtration systems came online. All systems are go. *It's time to add some air freshener.*

"Atmospheric saturation now at 45 per cent, Captain. Recirculation system operating at 100 per cent efficiency. Estimated time to achieve total fumigation of this facility, twenty-five minutes."

"Thanks, IANTO. Héloise will need about three more minutes before we can uncouple her from the injection point. I'm expecting some sort of reaction from our guests any time now. Look sharp."

"Aye, Sir." The androids responded briskly.

Two minutes later, the screaming started. The acoustics in the Lava Castle made it extremely difficult to pinpoint the precise origin of these sounds, although I was able to identify at least twenty different sources. I have never heard a more unsettling cacophony of agony and rage in either of my lifetimes, and this was one of the very few times I thanked my stars for inhabiting an android shell. Even Héloise was visibly shaken by the frenzied shrieking and roaring that rose and fell around us; even more so, as her suit is still coupled to the atmospheric processor. *Not long now, Love.*

As the flow counter ticked off 499 litres, I reached for the control valve. Héloise grabbed my wrist.

"*Non! - Cent litres de plus!*" She protested, her face a mask of terrible resolve. "Let them all burn!"

"A hundred litres more? Okay. It's your call to make. Mind, I'm uncoupling you as soon as that counter hits 600. No more arguments. There's already more than enough toxin in the air to do the job." I said firmly. Grudgingly, Héloise acquiesced.

As soon as we entered the main atrium, the ExoSuits rapidly deployed in line abreast formation. *Pasteur* and *Jenner* each had an escort of a Mk. V on either side, although it was entirely a moot point as to who would be defending whom.

"Well, there's no point in tip-toeing through the tulips... They know we're here now. Move out."

The atrium is a nightmare made flesh. If you still believe in such things, it was as if Hell had been scoured with a megaton-level airburst of holy water. The biofilm bubbled and convulsed wildly at our feet as the toxin tore it apart. We paid these death throes no mind, continuing our steady advance in spite of the treacherous surfaces underfoot. Simple structures such as this carpet of biomass would succumb to the toxin almost immediately, although we had no real data on how it would effect any of the more complex organisms. Our scanners detected larger clumps forming rapidly ahead, as if the Hive was attempting to gestate something capable of meeting us head-on.

Every time one of these egg cases began to emerge from the biofilm, it was either ripped apart by a blizzard of flechettes or incinerated with a short plasma burst. No mercy spent on the merciless. In spite of our relentless onslaught, several eggs actually reached maturity, each one disgorging a half-formed Skulk that mewled piteously and died almost immediately. One good lungful of this toxin-laced atmosphere would be enough to finish them. This convinced me that any further gunfire would be wasteful. Far better to conserve what resources we have until we really need them.

I am deeply concerned by the lack of any real opposition so far. When something starts out as a complete cakewalk, the hair on the back of my neck invariably starts to rise. The toxin is working remarkably well against newborn Kharaa, but what about those that have had time to grow some and adapt to conditions in here? Kharaa aren't immune to the Enzyme 42 toxin, and they're obviously hurting. Suffice it to say, they're rather pissed off at this point. And we have to face them.

The carnage continued unabated. We purged the atrium of all Kharaa life forms as we encountered them, leaving nothing but stinking desolation in our wake. By the time we finish this operation, the Lava Castle will be unfit for human habitation for a very long time. Although the foul-smelling organic residue was actively decomposing before my eyes, it could take weeks for all of this material to dry out sufficiently to be vacuumed up and incinerated in a plasma furnace. In the end, I conjured the game simply wasn't worth the candle. Too much work involved, and our window of opportunity for building and launching *Borealis* before hurricane season is closing rapidly. As soon as we've finished this butcher's work, I'll assign a few spare worker drones to clear up the mess. The most important task at hand is to destroy the Kharaa infestation completely. Leaving the Lava Castle in a habitable condition for any possible future castaways is a trifling concern, at the very most.

Recon drone FOXTROT has found something that is extremely disturbing. Apparently, there are several extensive 'dead zones' where the base's air circulation and replenishment systems are not operating at all. This means that any Kharaa in these areas are untouched by the Enzyme 42 aerosol. Worse still, each location contains an active Hive, undoubtedly well-protected by their usual complement of hostile warrior forms and organic defence structures. Perhaps the most unsettling thought of all is that we have detected precisely six Hives so far.

Six prisoners. Six Hives.

JUNO has redefined the mission profiles for our Blood Crawler scout drones. The plan is to assign four drones to infiltrate each Hive location and detonate as close as possible to the Kharaa intelligence inside, hopefully destroying everything in the immediate area with a cloud of Enzyme 42 aerosol. Even if this plan does not achieve a 100 per cent kill rate, it will at least neutralise a significant portion of any opposition in these zones. *Fingers crossed.*

Now that we have created a total no-go zone in the atrium, it is time to deal with the Hive in the Med Bay. DIGBY has rigged up another power cable to activate the systems inside, and it won't be too long before we can start dealing with our slimy friend in there. I wasn't about to start smashing the place apart to gain entry, in case anything nasty sneaked out during the hoo-rah that will most certainly ensue. There is barely enough vertical clearance for a standard ExoSuit to pass through the main door, but only *Jenner* and *Pasteur* are properly equipped to deal with anything that the Kharaa cared to throw at them in close combat. As for any possibility of backup in a tussle, forget it. *Jenner* is the proverbial 'elephant in the room'.

Ultimately, *Jenner* had to crawl through the doorway. I ordered JUNO to close the bulkhead behind me as soon as I was clear. Still on all fours, I was able to closely inspect the door seals as I passed through. What was supposed to be a completely inert and highly durable polymer had succumbed to the Kharaa biofilm's attack. Technically impossible. Even so, the proof was right in front of me. The seals had deteriorated into a slimy black mass, allowing the biofilm to pass easily into the corridor outside, spreading deeper into the Lava Castle's innards. The other Hives must have budded off from their point of origin, relocating in other areas of the base more conducive to rapid colony growth. I've heard that Kharaa use something called a 'Gorge Tunnel' for covert movement, similar in principle to a Zerg 'Nyduis Canal'. For some unknown reason, this one has not budged.

"*You are Selkirk. You are known to us.*"

The voice of the Kharaa intelligence sent ghostly chills through my neural network. It is a sound so cold, so utterly alien and remote that it conjured instant revulsion in my mind. It was a jagged blade drawn through a block of dry ice; a malevolent whisper seemingly calculated to grate against every synthetic nerve-ending in my body. It took a supreme effort of will to resist an urge to destroy this obscenity without further parlay. However, I was determined to hear what it might have to say.

"How do." I said amiably, "I believe we haven't been properly introduced yet. You apparently know me, but I haven't the foggiest idea of who I'm talking to. Sorry, pal."

"*We know you. Memories of those We have consumed. You will be consumed.*" The Hive said flatly.

I raised *Jenner* into a standing position, scarcely two metres away from the organism. Tilting the ExoSuit's torso slowly forward, I stared into its Cyclopean eye. There was a moment of silence as we regarded each other; sensing, calculating and evaluating the opponent before us. The Kharaa intelligence appeared to be completely defenceless in itself, its large, pod-shaped body suspended from a web of pulsating ligaments, each one as thick as a man's arm. This creature was nothing more than an overdeveloped eyeball, albeit one equipped with a capacity to analyse its surroundings, plan strategically and marshal various other Kharaa life forms to do its bidding.

"Consumed? I think not." I said calmly. "In case you're not up with current events, I'd suggest taking a closer look at your surroundings. We've made a right mess of your wee garden patch, and there's a lot more of the same in store for your mates. Better speak your piece while you're still able."

The central eye regarded me impassively. A couple of minutes ticked by before the organism spoke again. It's a fair bet that it was weighing up its options before responding, although I'm more inclined to think it was attempting to gestate something nasty to sic onto us. It doesn't matter either way. The air outside is thick with Enzyme 42 toxin. It wouldn't last long enough to pose a threat.

"You are not... Human. You are a machine. Flesh-mind joined to metal. You will join with We."

I shook my head slowly. "Now why would I want to do that? I'm perfectly happy as I am."

"You are strong, but We are stronger. We absorb. We conquer. Every form We absorb makes us stronger. You are few in number. We are everywhere. You will not defeat We. You will join with We willingly before your end comes. You will be stronger as part of We. You have clever hands. Make new Kharaa made of metal-flesh. Make stronger We. Make Selkirk most powerful Hive of all."

I snorted with ill-concealed disdain. This thing was actually suggesting that I submit to assimilation by the Kharaa swarm. In my mind's eye, I could see the greater nightmare unfolding as the creature whispered its vision of the future in my ear. Ultimately, this devil's deal that it proposed would unleash a plague of cybernetically-enhanced Kharaa against a helpless galaxy. War without end.

"Not going to happen, I'm afraid." I said casually. "Between you and me, I reckon you're telling me this to keep me occupied while your mates brew up some beasts to throw at us. Fair comment?"

"Of course." The Hive replied smugly. *"We will destroy you all."*

"Fair enough, Jimmy. Just one more question... Rare, medium or well-done?"

Jenner's plasma jet flared viciously, blasting an incandescent hole through the Kharaa Hive.

"Well-done it is, then. An excellent choice, if I may say so." I said brightly.

I scoured the Med Bay with the plasma arc, incinerating any remnants of the Hive that appeared to have survived my initial kill-shot. I'm not aiming to leave anything to chance here. As soon as I've finished dealing with this one, I'll check out the isolation bay. Not much hope of finding Polyakov and his Blue Meanies alive now. Their tissue would have provided more than enough biomass to spawn all six Hives. The fact that the Kharaa are aware of me as a specific entity undeniably confirms that our prisoners were assimilated in fairly short order. Tough break for Polyakov and Co. I sincerely doubt any of them were aware of what was happening when their time came. It's rough justice, but better than none at all.

One glance through the isolation bay viewport was enough. Very little remained of the cryo-stasis pods themselves, as they had been digested to provide raw material for the biomass invading this part of the facility. If those airlocks had been equipped with ceramic door seals right from the start, our prisoners might still be alive. It's too late to do anything about it now, except to clear up the mess we've made. Naturally, I feel considerable remorse in consigning them to this miserable fate.

I have no credible defence for my decision to leave them in a contaminated area. In the final analysis, Polyakov and I are equally to blame. His monumental stupidity and my casual arrogance have worked in perfect harmony to bring us to this point.

I'll let the philosophers work that one out. Right now, there are far more urgent matters that require my immediate attention. DIGBY and JUNO have reported movement in all corridors leading into the atrium. After fumigating the isolation bay and Med Bay to saturation point, I scrambled through the re-opened doorway and rejoined the crew.

"What's the tactical situation, DIGBY?"

"The first wave appears to be comprised of amassed Skulks and Gorges, Sir. Forty organisms in total. No discernible attack pattern has evolved as yet, although the composition of the first wave suggests that a *blitzkrieg* strike may be imminent. Also detecting a number of Lerks and Fades mustering in flanking positions, approximate count is somewhere between twenty and thirty organisms. There is a strong possibility that these stealth elements will launch their attack while we are still engaging the first wave. Standard diversionary tactics. Somewhat inelegantly applied, though still potentially quite effective."

"Sounds like we're in for a real scrap. If they've managed to survive this long against the effects of the toxin, there's obviously a fair bit of fight still left in them. Not good at all. JUNO, how are the recon drones faring?"

"Drones ECHO through ZULU inclusive are almost in position, Captain. Awaiting your orders, Sir."

"Excellent. Take ALFA, BRAVO, CHARLIE and DELTA and position them on the ceiling above the main entrances to the atrium. Detonate on my command."

"Aye, Sir." JUNO replied. The four drones scuttled away obediently, disappearing into the shadows.

"Brace up, people. Here they come."

CHAPTER NINE

It was as if someone had opened the floodgates of Hell. A torrent of frenzied Kharaa tumbled into the atrium, growling, snarling and screaming in agony. Even as the drifting enzyme clouds ate into their flesh, these creatures were being brutally compelled to hunt us down. Deep within the Lava Castle's darkest reaches, a cruel and calculating intellect coolly weighed its options, moving these expendable game-pieces around without sparing a single thought for their suffering. It probably felt as safe as houses, its mental essence spread equally among five other Hive entities. The loss of a single Hive was nothing more than an ineffectual pinprick inflicted by insects. Once control had been fully re-asserted, other Hives would certainly grow to replace the one I had destroyed.

"JUNO. All drone units. Detonate." I said curtly. "Héloise, set your mist flow rate to one litre per second. Word of warning, something strange is about to happen to your HUD. If you can't make sense of the visuals, hand *Pasteur's* autopilot controls over to me or one of the crew. You'll be perfectly safe."

"Not a chance, *Chérie*." She murmured sweetly. "I was born for this."

"All units. Activate multi-spectrum sensors, phased array mode, 0.5 second sweep. One last thing; this is a 3D engagement. Don't forget to look up. Mark your targets, and hit 'em hard. Good luck."

As my suit's HUD cycled through all IR, UV and sonar frequencies, our view of the atrium transformed into a psychedelic fever dream. I glanced anxiously across at Héloïse. At first, she seemed disoriented by this overwhelming barrage of visual data, although her ExoSuit moved surely as we began our advance. To my surprise, she was able to master this bizarre world-view with ease, gradually adapting her sight to process the rapidly flickering images. I confess that my hand hovered near the over-ride control as I watched her initial struggle, and it was with great relief that I guiltily tore it away.

Something is definitely happening to the Kharaa. Their initial onslaught of slavering, mindless fury had dissipated almost immediately, leaving them milling around the atrium in utter confusion. Most of the vanguard had been caught in the concentrated toxin clouds released by the drones stationed above the entrances to the atrium. The fact that all five Hives had simultaneously received an even more potent dose of Enzyme 42 only added to this confusion, and the entities therein would also be feeling its effects rather acutely at this point. If Kharaa are capable of expressing any of the more finely-tuned emotions, I'd suggest 'abject fear' as a reasonable starting point. As of now, they are sitting squarely on the anvil.

And we're about to bring the hammer down.

We broke cover, catching at least ten Kharaa by surprise. Gauss cannons howling, we fell upon them like wolves. Brilliant blue-white corona discharges flared, briefly illuminating the carnage as a stop-motion animation; a surreal sight. A couple of Skulks charged us and sheered away at the last second, desperately turning tail as the toxin clouds pumping out of *Jenner* and *Pasteur* corroded their tissues. A cloud of flechettes from *Guinevere* and *Percival* ripped these brutes apart in mid-stride. We continued to advance relentlessly, sweeping all opposition aside with almost surgical precision. There was no sport to be found in this slaughter. It simply had to be done.

Bio-scanners are very handy gadgets, although they do have certain serious limitations. Right now, we're experiencing their most inconvenient design flaw. Surrounded (as we are) by a significant number of Kharaa warrior forms, our long-range sensors have become practically useless. In fact, our scanners are utterly swamped by a massive influx of close-range life sign data, and all of them appear to be throwing a major hissy-fit. This might have something to do with being in a 'target-rich environment', since we're smack-bang in the middle of a morass of dying biofilm and a seemingly endless flow of stealthy attackers. Fortunately, the multi-spectral HUD view is still working effectively, although some advance warning of this current attack would have been greatly appreciated. As DIGBY had predicted, a sizable contingent of Lerks and Fades struck as we were tussling with the second wave of Skulks and Gorges. Suffice it to say, things got considerably more hectic at this point.

Guinevere staggered heavily, blind-sided by a belly-sliding Gorge. JUNO tapped her ExoSuit's jump jet, catching it neatly before it completely overbalanced. The dazed Gorge at her feet barely had time to shriek as IANTO's flechette burst shredded its head. *Percival* and *Gawain* pivoted in unison, surging forward to intercept a pack of Skulks closing in on *Pasteur*. I spotted a sizeable pack of hazy shapes nimbly scaling the rough-hewn basalt walls of the chamber, heading for the ceiling. Lerks.

"IANTO! Three o'clock, elevation sixty!" I yelled.

IANTO's ExoSuit *Galahad* spun around, whipping its flechette rifle into firing position. *Jenner* pounded forward like an enraged rhino, its Gauss cannon spooling up to fire. Anything coming in on the deck for *Galahad* is in for a very nasty surprise. IANTO opened fire on the Lerks scurrying across the ceiling, snapping off a dozen precise three-round bursts in quick succession. As anticipated, a trio of Fades materialised silently behind *Galahad*, crouching low as they stalked their prey. Using a millisecond data burst, I let IANTO know what was happening, advising him to keep their attention fixed on *Galahad*.

As the last Lerk exploded in a spray of vile fluids and splattered on the deck, all three Fades sprang forward for the kill. I managed to nail two of them before they covered half the remaining distance to *Galahad*, but the third was just that little bit quicker than my Gauss cannon's recycle time. Even so, IANTO knew what was about to happen, and acted accordingly. A split-second before the remaining Fade slammed into *Galahad*, IANTO pivoted to the left as skilfully as a matador, causing the beast to sail harmlessly past him, landing in a crumpled heap. It was back on its feet in seconds, snarling defiantly and slashing the air with its massive scimitar-shaped forelimbs. IANTO shifted his ExoSuit into a braced stance, poised to absorb the creature's impact.

With a deafening shriek of rage, the Fade launched itself at *Galahad*, its scything talons a blur of unearthly speed. IANTO stood his ground until the beast was barely two metres away. I was about to yell out a warning that my shot was blocked, although IANTO appeared to be squaring up to melee with this one, regardless of the danger those talons posed. I've heard stories of TSF power armour being torn apart like tinfoil by Fades. If he's about to do something clever, now's the time...

He shot it. Point-blank with a plasma burst. No fuss, no flashy footwork. Just one big plasma flash.

Well played, Doctor Jones.

Today's lesson: Never bring scimitars to a gunfight.

I'll say one thing in the Kharaa's favour. Those bastards definitely know how to fight. I wouldn't say I actually admire their tenacity, since these creatures are merely tools of the malign Intelligences goading them into battle. Even with their Hives knocked out of commission, the warrior forms exhibited far more intelligence and outright battle-savvy than most Terrans would give them any credit for, even though it was obvious that the tide of battle had turned against them.

The massed attacks became noticeably less frequent. Occasionally, one or two Fades would attempt a stalking attack on the outermost elements of our force, only to be met with a devastating barrage as all weapons were brought to bear on a single target. For all intents and purposes, we appear to have broken the main Kharaa assault force, although I'm not about to start handing out any cigars just yet. A moment later, DIGBY confirmed my suspicions.

"Sir, I have completed a tactical analysis of the battle up to this point. According to verifiable data, we have accounted for an estimated eighty-five per cent of all Kharaa forces encountered so far. However, this is an estimate based upon unreliable data provided by our life sign scanners, and as such, is best interpreted with an appropriate measure of caution. During the last sortie, only ten per cent of Kharaa units within visual range were actually committed to that attack. The remainder

apparently withdrew as we engaged their vanguard. Most unusual, since that particular attack pattern had a significant probability of inflicting some serious damage to our force."

"You got that impression too, DIGBY?" I drummed my fingers on the display console absently, trying to nail down an errant train of thought. "Aye. Something wasn't quite right about that last wave. I'm dead certain of it. Seemed a wee bit half-hearted towards the end, wouldn't you say?"

"More than a little, Sir." DIGBY observed. "One might even suppose that the Kharaa are actively adapting their strategy to counter the ExoSuits. They have apparently realised that they can no longer achieve their objectives by direct assault. Logically, one might assume an ambush is being laid somewhere deeper inside the complex. Any one of the four recreational spaces would be ideal."

"Fair comment." I agreed. "However, all those minor corridors are a tight squeeze for a Mk. V ExoSuit. *Jenner* and *Pasteur* won't fit at all. We'd all be lined up like dominos, easy pickings for the first beastie lurking around the next corner. I cannae see the sense in walking into a trap like that."

Therein lies the rub. We had turned the atrium into a perfect kill-zone, although we could no longer count on the Kharaa to stroll obligingly into our line of fire. So what do we do now? We could simply wait them out, picking off whatever comes our way, or stooge around hoping that the Enzyme 42 cloud finishes them off sometime before Alpha Hydrae becomes a cold, dark cinder. Stalemate.

We stood there like a bunch of complete wallies as I tried to devise an acceptable course of action. Naturally, the crew were too focused on sweeping the area for potential threats to comment, although Héloise drew attention to this apparent loss of forward momentum in her own inimitable fashion. Before I could stop her, she opened *Pasteur's* canopy and dismounted. Muttering inaudibly, she uncoupled the Gauss cannon, slung it across her body and glared accusingly at me.

"*Hoy! M'sieur!* What's with the blerrie holdup? *Allons-y!*" She bawled.

Well, since you put it so nicely, Dear Heart... How can I possibly resist?

"All units, disperse your suits to cover. Hull down, minimal radiated power signatures. Set internal AI to MARTIAL overwatch mode. Can't have those dirty scunners sneaking up behind us."

After finding a suitable spot for *Gawain* to hunker down, I guided *Pasteur* to its own hiding place and set its combat protocols accordingly. Any Kharaa attempting to launch an attack from the rear would be cut to pieces. No questions asked. Woe betide anything approaching without an active IFF beacon. Naturally, Héloise had free passage back into the atrium, since her dive suit's PDA had been registered as a valid authenticator before commencing this operation. Absolutely zero chance of a 'friendly fire' incident happening, particularly when you add her personal biometrics to the equation. She's the only human in here, and even a Kharaa organism with some vestigial traces of human DNA won't pass unnoticed. You can count on that.

I turned to face Héloise, my expression apologetic. "As much as hate to say it, Hen... You'll have to stay out of trouble as much as possible this time around. The atmosphere in here is lethal to pretty much anything organic at this point. One rip in your suit, and that's it. Best guess is that you'll have

less than five seconds to slap on a repair patch. In fact, you'd best move a couple to a more accessible position than that belt pouch, since we may not be able to reach you in time. Stay close."

Héloise nodded wordlessly. There was nothing more to be said.

Every Spacer has an almost identical secret nightmare, and now it unfolds before us. The darkness looms around us as a malevolent presence, replete with unseen horrors. What scant light fell in that hellish maze of corridors offers little comfort, only serving to throw distorted shadows and cast dire uncertainty upon my decision to enter this place. If I were wholly human at this point, I would not hesitate to turn back. Play the safe hand and obliterate the Lava Castle with nuclear devices. This is no place for heroes. In time, I might be able to sleep soundly once more. No more waking in a cold sweat. No half-choked scream of terror rising in my throat. If I were human once more.

I do not have this luxury. Although I feel apprehensive, I am not afraid of the darkness and all it conceals. My greatest fear is that we fail to carry out this mission to its absolute end. If only a single strand of Kharaa DNA survives intact in this place, we will have failed. Given time, the Kharaa may gradually adapt to the effects of Enzyme 42, emerging triumphant to lay waste to all life on this planet. It will emerge from the withered remains of its weaker self; reborn with new-found strength and a burning purpose. Then it will leave the confines of *Manannán* and find other worlds to conquer.

True darkness shall descend.

Even the furious light of nuclear fire may not prevail here. The Kharaa blight will certainly take advantage of its slightest chances of survival, and that is why we are here. Every last trace of the organism must be obliterated before we can leave this planet. *Sky Watcher* will burn us before allowing *Borealis* to launch and spread the contagion any further. This is a definite fact.

The corridors are becoming eerily silent. Only a few minutes before, the air had been alive with enough frenzied shrieking, howling and roaring to shred the nerves of all but the hardest souls. Without our ExoSuits, we are effectively naked. Even Héloise's customary steely composure began to erode as we ventured deeper. She flinched at the slightest sound now, searching desperately for its source. In its own way, that gaunt silence was infinitely more terrifying.

By the time we caught up with the fleeing Kharaa, they were in no condition to put up any kind of fight. Judging by the number of dead and dying that littered the foyer of the Executive quarters, they were obviously trying to prepare a last-ditch ambush for us. A handful of Skulks and Gorges that still clung doggedly to life were quickly dispatched with single shots, speeding their journey Beyond. I'd like to believe there was some small measure of mercy in this action, although to be perfectly honest, it was done more out of simple necessity. I had discovered a way of tuning out most of the background readings in the bio-scanners, reducing the amount of visual clutter to more manageable levels. Not that it mattered now. The Kharaa biofilm was in the final stages of dissolution, as were most of the more heavily-affected warrior forms. Walls, ceilings and decks were coated in an inert slime, oozing and dripping from every surface in the Lava Castle.

Their ambush location was no coincidence. Baat Torgal's research facility lay behind a concealed door, some fifty metres ahead. As far as I know, there's a strong possibility that almost no Enzyme 42 aerosol has penetrated the research section yet. We all carry a 15-litre backpack sprayer

charged with a full-strength solution, although this system was purely intended for spot decontamination of biofilm and Kharaa defensive structures, not melee combat.

And yet, we may well have to jam our spray-guns down the throats of our attackers, if need be. That corridor ahead is not much larger than a standard shipboard passageway, so the ExoSuits won't be much use in there. Absolutely no room to spare for capering about with a pack of Skulks snapping at your heels. I wanted to leave Héloise and DIGBY outside, ostensibly serving as our rear-guard, but she would have none of it. End of discussion.

I studied the access door carefully, evaluating the best and safest way to breach it. Half a metre of layered armour-grade titanium, packed with at least 50 kilograms of Molanex shaped-charge explosive, give or take a gram. Setting it off posed no problem at all. Getting the *big badaboom* to go in the right direction was the tricky part. After running the numbers and checking them thrice, I conjured enough mass piled in front of the door would tamp the explosion sufficiently to reverse the direction of the blast wave. However, there is a slight catch to this clever solution I've devised. We need to pile at least ten metric tonnes of matter in front of that door. Not just any old junk, either. Each piece has to be selected for its physical properties and placed in a carefully defined sequence.

Och, ma poor achin' servos.

Suffice it to say, this process took quite some time. Six point seven-five hours, to be precise. Mattresses were the first items on the list. Their composition is ideal for absorbing kinetic energy, although they aren't particularly resistant to physical damage on this scale. However, they are compressible to a miraculous degree, and that property makes them well suited to this particular application. We had to compress a three metre-thick wall of mattresses into a 200mm-thick barrier layer. That alone involved some serious effort... And, Baat Torgal's exceedingly shiny basalt table. I have attached a precise pattern of eight seismic survey charges to the door before our shoving match with the mattresses began, guaranteeing a slightly smaller (but well-tamped) counter-explosion occurring mere picoseconds before the main blast.

In theory, the shockwave from the charges would still be propagating as the booby-trap fired.

I eyed our carefully-built pile of garbage with a wicked grin, and keyed the trigger. "Knock-knock."

As explosions go, this one was almost embarrassing. No earth-shattering *ka-boom*. Sorry.

There was a lifeless *whump* from somewhere deep inside the mound of rubbish. The entire mass bulged and shrugged briefly, slumping back into itself with a weary sigh. A few thin tendrils of smoke escaped from the tightly-packed material a minute or so later, probably emanating from what remained of the mattress stack. Polymer aerogels are designed to have excellent fire-retardant properties, although experience has shown that anything will burn when enough heat is applied. Fortunately, there won't be enough available oxygen to support combustion inside the pile. Even so, we'll have to be careful as we're clearing this lot away from the door. I don't recommend plunging your hands blindly into a mass of molten plastic.

In fact, the true magnitude of the explosion was far more obvious through the soles of our feet. The basalt floor of the foyer rang like a huge, dull bell underfoot. My sensors detected two discrete detonations, almost perfectly overlapping. Precisely how I wanted it to happen.

Those seismic charges may have been much lower in mass than the 50 or so kilograms of Molanex embedded in the door, although they were loaded with a particularly powerful compound called GelMax. Seismic survey techniques require a long, steady boom to image deep geology clearly, and GelMax is the right stuff for the job. Most definitely a case of 'more bang for your buck'.

Eventually, we managed to clear a path through the wrecked barricade. The door was well and truly gone, along with most of its reinforced support frame. If anything had been waiting for us on the other side, its last couple of milliseconds may have been quite interesting, if somewhat abrupt. Apparently, the connecting corridor served admirably as a shotgun barrel, as witnessed by the swathe of devastation that scythed halfway through the agricultural research bay.

We advanced quickly but cautiously through the corridor, fanning out into a widely-spaced skirmish line. A quick search of the bay revealed it to be almost devoid of life, although the bio-scanner detected dense outcroppings of Kharaa biofilm clustered around Baat Torgal's laboratory. We could spare a dose of Enzyme 42 on these growths as we passed through, although it would be pointless to cleanse those infestations until all larger organisms that occupied this section of the base had been destroyed. The biofilm posed no actual threat at this point.

The creatures that it nurtured were a different story.

As we neared the laboratory, the bio-scanner's readings became increasingly unreliable. The readout screen showed absolutely no detail, just an amorphous mass of heaving Kharaa life all around us. Even visual data proved to be highly dubious, at best. This infestation seemed *different* somehow; strange growths and structures had emerged from the slimy mass underfoot, making it seem as though an alien forest had taken root here. One growth resembled a young fern shoot, all coiled up like a fiddle-head. Apart from its size, it looked completely benign. Based on its appearance alone, we deliberately gave this one a wide berth. Something wasn't *quite right* about the way it tensed up as we drew near. Likewise, we avoided getting too close to the ones that resembled long-necked barnacles. Too much like a Tiger Plant for my liking. As I've discovered over the years, a little caution might take you the long way round, but at least you'll arrive in one piece.

We've had enough unpleasant surprises today, thank you very much.

The cavern's silence was shattered by a thunderous roaring. A pair of shrouded Onos emerged from their hiding places, de-cloaked and charged towards us. Caught with almost no reaction time, IANTO and I looked to bear the full brunt of their initial assault. Héloise and the crew were already pivoting to face their closest targets. Their flechette rifles lit up first, sending a furious swarm of titanium darts at the rampaging beasts. In a situation such as this, three seconds is too gorram long to wait for your Gauss cannon's capacitors to spool up.

I was airborne. Even though I had tried to sidestep out of its path, the Onos simply tossed its head to one side and caught me as it charged towards our line. It was a glancing blow, but heavy enough to fling me aside like a rag doll. My HUD lit up like an old pinball table, displaying a litany of critical systems damage that tallied up too fast for human eyes to follow. Aye, he's definitely nailed me.

My mangled body slammed heavily into one of the raised cultivation beds. *There goes my warranty.*

If anything, the constant barrage of flechettes only served to enrage the Onos even more. Our dart guns are practically useless against their dense hides, inflicting less damage than a bad patch of stinging nettles. Only a Gauss cannon could make a dent in these beasts, and mine was laying fifteen metres away. From what I could hear, IANTO managed to land a solid hit on one, although it was still very much alive. Take it from me, that shrieking roar does not bode well for anyone facing an Onos. It doesn't necessarily mean that you've mortally wounded it. Far from it. Consider that sound a fair warning that this tussle has lost any remaining semblance of civility. You've just flipped the Onos' Berserker switch. Good luck with that one, chum.

I attempted to struggle upright, but couldn't even raise myself on an elbow. My efforts were rewarded with another flurry of system alarms and a jet of coolant from somewhere in my lower torso. Face it, there's absolutely no chance of walking away from this one.

"Captain!" JUNO cried. "DIGBY is on his way over, hang on!"

"Belay that! I'm no use to you. Look to yourselves!" I yelled.

I tried piecing the battle together from what meagre input my functioning sensors could provide. The Onos were hawking away at the crew, charging in and wheeling away with frightening speed and agility. Above the angry hornet's buzz of flechettes ripping through the air, I heard a second Gauss cannon open fire, most probably JUNO or DIGBY. IANTO's piece had hit its stride, chugging out a round every five seconds as its capacitors recycled. Even with an android's superb reflexes and advanced targeting systems, the Onos proved to be cunning targets in spite of their massive bulk. Time and again, their unpredictable jinking and darting charges frustrated the aim of our Gauss gunners, and I actually heard JUNO swear in a most unladylike manner. Can't say as I'd blame her.

The cacophony around me rose to a cataclysmic pitch. All I could do was stare at the ceiling of the cavern, feeling drained and utterly useless. We're all going to die here.

Suddenly, Héloïse shrieked. I felt heavy footfalls reverberating through the basalt floor beneath me. Its pace was unhurried, almost as if it was savouring my imminent demise. Helpless, all I could do was analyse its rate of approach as if this were an abstract exercise; one calmly considered without consequences. At five metres, the Onos loomed over me like a collapsing rock face, its craggy features drawing into a bestial grin. *Enough mucking around. Make it quick, you bastard.*

Something made the Onos momentarily stop and turn around. It vented a terrifying roar, shifted its position and readied itself to charge. I guess it's finally worked out that I'm not going anywhere, so now it can give the crew its undivided attention. If I could throw something at this brute to keep its attention fixed on me, they might stand a fighting chance. Unfortunately, the only thing in arm's reach was what remained of my right arm. Better than nothing, I guess.

Desperately, I heaved the ragged mass of metal at the creature's ample nether regions. It was a clumsy, end over end throw, but it definitely found its mark. The Onos snapped its head around, roaring its displeasure at this pathetic affront to its dignity. This was all the distraction Héloïse needed.

With a blood-curdling *kiai*, Héloïse sprinted across a cultivation bed and launched herself at the Onos. With the breathtaking skill of a Minoan bull-jumper, she used her momentum to grasp the

blunt maxillary horns on either side of its jaw and flipped herself clear over the beast's head, landing as lightly as thistle-down upon its massive back. Héloïse shifted her stance deftly as the Onos bucked to shake her loose, its rough, scaly hide providing sure footholds as she practically *danced* her way towards its shoulders. I have only seen her move like this once before, and even then, it sent chills of dread down my spine.

Her diamond thermoblade flared like a miniature nova, almost too bright to bear. She lunged forward, slashing into the Onos with a precise hand and deadly calm. Immediately, the Onos screamed in abject fear and agony; a high, pitiful jarring sound that seemed incongruous for a creature so immense. It tore at your very soul. It was a sound you would never want to hear again.

I found myself torn between admiration and revulsion. Héloïse shifted stance once more, her tattooed face a placid mask of concentration. Her lean body moved and swayed, skilfully countering the Onos' terrified gyrations with an absolute economy of motion. I sensed that the butcher's work was done. No-one could hear that unearthly scream and remain entirely unscathed, although Héloïse seemed impervious to its effects. Time to administer the *coup de grâce*.

Please.

In a blur of motion, Héloïse's *musubime* unfurled. Her cybernetic Guardian Knot extended to a length of four metres, its ornate bronze-coloured metal tip whipping up too fast for human eyes to follow. It swayed briefly, seeking its target. Héloïse uttered an explosive *kiai*, driving the razor-sharp tip deep into the gaping wound she had carved into the Onos' spine. The creature emitted a strangled squeal, shuddered violently and toppled sideways. In a final display of matchless skill, Héloïse rode the corpse down as it fell, springing off lightly before it thudded to the floor. The remaining Onos roared insanely, wheeled about and charged straight at her. Héloïse shifted *kata* with the fluid grace of a temple dancer, calmly preparing for the arrival of her next target.

JUNO, DIGBY and IANTO fired simultaneously, three perfectly-aimed hypervelocity projectiles instantly gutting the Onos. Its body crumpled and fell, skidding to a halt a few metres away from Héloïse. For a moment, she merely stared at the obscene mass of flesh, her face still locked in its implacable mask of warrior's resolve.

At least, until she noticed that I was now covered in steaming chunks of Onos entrails. Charming. Nice shooting, guys.

Héloïse snapped out of warrior mode instantly. She kneeled down beside me, and gently began clearing away the reeking filth spattered all over my body. Her tears flowed in absolute silence. Suddenly, I felt deeply ashamed to be found in this disgusting condition. I moved my arm feebly, attempting to reassure her that I was still vaguely functional. She drew back with a gasp, momentarily startled by this unexpected motion.

"I'm still here, Love. Thanks for saving what's left of my hide." I whispered gratefully.

JUNO, DIGBY and IANTO arrived a few seconds later. JUNO inspected me thoroughly and sighed.

"Doesn't look good, Sir. You have sustained catastrophic damage to your lower torso and drive systems. Your isotopic thermal converter is offline and internal power reserves are currently at 26

per cent, falling rapidly. Coolant reserve is currently at 41 per cent. Primary energy cells One, Three and Four have been totally destroyed." JUNO paused, as if tallying up my final bill. "There is no other choice but to remove your memory core before its matrix deteriorates, Sir. Do you concur?"

I nodded cautiously, a chorus of damaged servos protesting every step of the way.

"I concur, Commander. Mission log has been duly updated, and reads as such: The android form of Acting Captain Alexander Fergus Selkirk has been damaged beyond repair as a direct result of enemy action, rendering Mission Commander Selkirk physically incapable of exercising full and effective command. In accordance with Alterra Company regulations, I freely acknowledge all obligations in this regard and hereby relinquish all command functions, effective immediately. The artificial intelligence entity designated as JUNO has been nominated to assume full command upon my deactivation and will freely relinquish those duties upon my subsequent reactivation at full capacity, timescale indeterminate. Addendum: Let the record also show the following Torgaljin Corporation security personnel are officially listed as killed in action: Armin Mikhailovitch Polyakov, Ran Harlo, Kobus den Bakker, Kassim al-Fuad, Cormac Harrigan, Jespen Haraldssen. Dated, Mission Year 2277 C.E, Sol 125. Local time, 0425 hours. Alexander Fergus Selkirk, out."

Héloise gazed sadly into my eyes. She blinked fresh tears away, desperately fighting for control.

"Don't go, *Chérie*..." She looked up at JUNO beseechingly, "You can repair him, no?"

JUNO shook her head. "Not here. We can't even transfer him to the nearest repair facility without causing even more damage to his systems, no matter how carefully we do it. As I said, our only hope is to retrieve his memory core and keep it connected to a suitable power source during the transfer process. Any complex memories created since the Captain's last backup will be lost entirely. Pure data can be replaced easily enough, although his aggregate sum of experiences beyond that point will be severely diminished as a result. Entire blocks of recent memory will cease to exist. An extremely unpleasant situation, to say the very least."

I interrupted hastily, lest Héloise get entirely the wrong idea.

"It's true, lass. I can't be repaired, but I *can* be rebuilt. In fact, I can be upgraded in practically any respect. A more impressive physique, paired with increased strength, speed and agility... Slightly more attractive features, perhaps? If there's anything you'd like changed, now's the time to say it."

"I love you just as you are." Héloise's eyes twinkled impishly. "*Une minute*, there is one *little* thing..."

Héloise leaned slowly forward until our helmets touched. Judging by the enigmatic smile she wore, 'right now' might be a good time for a spot of tactful radio silence. Purely for propriety's sake, of course. To their credit, the crew took great pains to politely ignore this brief but intimate exchange.

"Frankly, I'm shocked at your indelicate suggestion, Madame Maida. You wound me." I grumbled.

"*Foof*. You are not taking me seriously again, my Captain. I can tell." Héloise said haughtily.

"You're *sure* about this?" I enquired quietly. "It's a mighty big ask, at least as far as I'm concerned."

"*Absolument*." Héloise declared emphatically.

JUNO sighed, tapping her wrist PDA in mock exasperation. *Yes, the clock's ticking. I know.*

Always the stickler for correct form, JUNO braced smartly to attention. "Any final orders, Captain?"

"Aye. If you'd be so kind as to hose me down a bit before doing the deed, I'd be verra grateful. Wouldn't want to go out honkin' like a public privy. Not the most dignified way to clock off, ye ken?"

"Certainly, Sir." JUNO replied. "However, I was in fact seeking more detailed guidance from you regarding the final stages of our mission. What are your orders, Sir?"

"First off, expend all of our onboard stocks of Enzyme 42 in this area. I'm guessing there's one final Hive somewhere in here, and it's a fair bet those Onos were protecting it. Terminate the Hive with extreme prejudice, and then douse this entire area thoroughly. Most importantly, mind that you scour the access corridor that leads to the Precursor facility. There's no need to go any farther than that. *Keeper of Memories* can deal with anything appearing on his side of the force-field."

"Very well, Sir. IANTO strongly recommends that we flood the Lava Castle after our departure. This will permit more effective dispersal of the Enzyme. I will be able to remotely operate the pressurisation controls once we have re-routed power to the necessary systems. When water pressure inside the base has equalised, the main sub bay's cargo doors can be opened. This will allow indigenous life forms to gain access to the facility, and enable them to deal with any remaining traces of the Kharaa organism in their own way."

"Nicely done. That should prove quite beneficial in the long run. Sooner or later, *Father of Tides* will meet up with *Keeper of Memories* and have a grand old chinwag. No doubt all of that weighty Precursor knowledge will be put to good use eventually. I only hope that those folks remember all that we've tried to do for them, rather than what's been done to them. With any luck, they'll think of us kindly."

IANTO loomed over me.

"I'm sorry, Sir. We've run out of time. I have to remove your memory core now." He said quietly.

"Fair do's, lad. One last thing... Win or lose, I'm powerful proud of you all. Be magnificent."

JUNO smiled warmly. "Thank you, Sir."

+++PROGRAM TERMINATED+++

CHAPTER 10

+++ BOOT SEQUENCE INITIATED +++

+++ PYGMALION 5.0 AI BIOS ONLINE +++

+++ NEW DEVICES DETECTED... LOADING +++

"Welcome back, Captain."

I am completely immobile. JUNO, DIGBY and IANTO are in my immediate field of vision, although I couldn't see Héloïse anywhere. I admit that I found this a little disappointing, at least until DIGBY

moved aside to reveal her curled up in a catlike ball on one of the workstation chairs. She's been awake and fighting like a tiger for over 40 hours, so I could hardly begrudge her a wee nap.

"Don't be alarmed, Sir. We're running a systems diagnostic at the moment." JUNO explained. "Full corporeal functionality will be restored in precisely 420 seconds."

Far from being alarmed, I am practically ecstatic. The very fact that we are all safely back in *The Broch* meant that the mission had been a success. At this point, everything else is icing on the cake. Meanwhile, there were some *unusual* sensations flowing along my neural pathways as the diagnostics ran their course; eyes cycled through the visible spectrum in a disorientating blur, then ticked off the infra-red, ultra-violet and a myriad of previously unseen EM frequencies. Apparently, I can now see radioactive emissions and radio frequencies. Very handy.

Seven minutes. The longest seven minutes in any of my lifetimes. It was an interesting experience, all the same. Not at all unpleasant for the most part, although I felt unusually eager to step out of the servicing gantry and see what today had to offer. JUNO had obviously anticipated this, hence my currently immobile condition.

I feel absolutely splendid. The closest comparison I can think of is trading up from a dinky electric commuter-scooter to a Mach 5 atmospheric fighter. This new body positively hummed with power and agility, even though I had no direct control of its actions just yet.

+++ DIAGNOSTICS COMPLETE. ZERO DEFECTS. COMMENCING SOMATIC CALIBRATION. +++

"Excellent, Captain. All that remains is a series of fine motor skills and cognitive function tests. These routines are programmed to run automatically, although you may elect to assume personal control at any time during the sequence. You now have the conn, Sir." IANTO said.

The service gantry rotated through 90 degrees, bringing me into an upright position. My first motions were tentative, yet precise. My head rotated through its full arcs of motion. Fists clenched, arms and legs flexed, fingers performed fluid arpeggios in the air. I walked over to a workbench automatically, then proceeded to complete the practical exercises set out before me. I admit that I felt slightly foolish in allowing the test program to manipulate me like a drone, so I punched out of the passenger's seat and continued under my own steam. It was almost like my first Vocational Evaluation exam, although I wasn't some spotty would-be Gremlin sweating on the results this time.

I am the master of my fate, I am the captain of my soul.

In due course, we managed to get all of that robotic rigmarole neatly done and dusted. In real terms, I had only been offline for little more than four and a half hours. Fabricating a new body took almost no time at all, so most of this period was spent integrating my psyche into the New and Improved Selkirk 3.0. As far as I can tell, my memories are entirely intact, apart from a 38-minute blank patch that took place while my memory core was bouncing around in someone's backpack.

Actually, it wasn't as bad as that. I've been assured that all reasonable care was taken while I was in this vulnerable state, and JUNO's word is good enough for me. A two-second data burst from the crew filled in all of my memory gaps, and I was able to review the final stages of the mission from their perspectives. DIGBY's generous offer of breakfast was gratefully accepted by all, and while he

pottered around in the galley, I used this break in proceedings to replay the final confrontation. Surfing the crew's data recordings gave me some unique personal insights, allowing me to experience their emotions by proxy, as it were. Suffice it to say, I'm completely gobsmacked by what happened.

DIGBY had taken point as they neared Baat Torgal's ruined laboratory. JUNO, Héloise and IANTO followed, obliterating everything in their path. There wasn't much in the way of serious opposition, although I get a distinct impression that all of them would have preferred otherwise. A palpable sensation of fury burned in the crew, held tightly in check by an unassailable sense of duty. Even though I wasn't able to access Héloise's memory in this fashion, her outwardly calm expression masked a gathering storm. Every step brought her closer to something that would pay dearly for her sorrow. It didn't matter that I wasn't actually dead. A powerful sense of loss was still fresh in her mind. Héloise chose to wield her grief as a weapon, rather than cover behind it as a shield.

Presently, the crew stood before the last Hive. It sensed their presence in the gloom, rotating slowly in its suspensor web to face the intruders. It surveyed the crew in silence, coolly analysing their threat potential and presumably began devising a hostile response, purely out of habit. However, the Kharaa intellect was *'Stercus ex Fortuna'*, as they say in the Classics. Utterly defeated, and unable to gather sufficient raw materials in time to mount even a token defence against the crew.

Haltingly, it spoke. An ancient voice rasping tones of pure malevolence, defiant to the bitter end.

"This one is ended. More of We will come again. These worlds belong to We. You will all die."

Something bizarre was happening within the Hive's body. Its dim luminescence flared, colours shifted and swirled across its Cyclopean eye. At first, I thought that it was reacting to the toxic atmosphere slowly seeping into the room, but I was mistaken. In the creature's composite mind, a struggle for supremacy had just been won. Suddenly, the Hive's sound membrane boomed out a series of weird, choppy noises. Laughter. The damned thing was actually laughing at us.

"Where is Selkirk? Where is your bogatyr now?" An all-too familiar voice jeered.

JUNO stepped forward, levelling her Gauss cannon at the Kharaa's central eye.

She smiled icily. "Captain Selkirk sends his warmest regards, *Gospodin* Polyakov. **** **YOU!**"

A 10mm LAC projectile delivers 2.5 megajoules of energy to its target. One round will make life extremely unpleasant for anyone riding inside a light armoured vehicle. Three rounds will effectively disembowel a charging Onos. You don't want to know what happens when FOUR rounds strike a Kharaa hive. Let's just say you'll need two buckets. One of them is for your personal use.

I fast-forwarded through the remainder of the crew's recordings, before filing them away for future reference. JUNO rose from her seat and stood smartly to attention, her bearing a masterpiece of spit and polish. *Ah, yes. There's one last piece of official business that we must attend to.* As was expected of me, I also rose and braced to attention.

"Crew data logs have been duly received in good order and reviewed, Captain JUNO. All personnel mission time codes are now synchronised. Mission commander is reporting as fully operational and ready for duty. How do you stand, Ma'am?"

JUNO saluted. "Mission log updated accordingly. I stand relieved, Sir. You have the conn, Captain."

"Thank you, Commander. I congratulate you and the crew for completing the mission. Well done."

I returned to my seat. To my surprise, JUNO stolidly remained at attention.

"Is there anything else to report, JUNO? If not, please sit down and enjoy your breakfast."

"Sir, I wish to submit myself for official reprimand. I stand guilty of conduct unbecoming an officer. In particular, my choice of words prior to the termination of the Kharaa hive." JUNO said stiffly.

If that was the full extent of her sins as an officer, most of the Terran Fleet would be in irons by now. I waved her confession away airily. Sometimes, it's possible to be *too* punctilious. He that lives by The Book will be swamped by needless paperwork. It's best just to let this one slide.

"Och, awa' wit' that, Lass." I said, chuckling amiably. "The Merchant Service has a time-honoured tradition of resorting to profane speech in stressful situations. Ye would'na be the first, and you're no' the last to drop a wee F-bomb in the heat o' the moment. Consider yourself officially reprimanded... And for pity's sake, please take your ease. I daresay you've earned it."

"Thank you, Sir." JUNO replied.

Just as DIGBY had finished serving, Héloïse strolled into the mess-hall, rubbing sleep from her eyes.

"Ah, *bon*. I am not too late after all." She murmured. As she took her seat, DIGBY popped up.

"Good afternoon, Mme. Maida." DIGBY said graciously, "What may I prepare for you?"

"Whatever you feel like cooking, M'sieur DIGBY. *Shimatta*... I could eat a Reefback!" She growled.

"Of course. *Bleu*, rare, medium or well-done, Ma'am?" DIGBY enquired gravely.

Ultimately, Héloïse settled for a cheese omelette and seaweed salad instead. As we ate, I noticed that she was studying my features intently. For a moment, I thought that my face hadn't been installed properly. IANTO noticed this wordless exchange, surreptitiously stroking his chin to gently prompt me. Gorram it. I'd forgotten to make that one 'little change' Héloïse so earnestly desired.

Feeling slightly foolish, I accessed the relevant physical subsystems and issued a command for hair growth. Time to bite the bullet, as they say. I've never been a huge fan of facial hair, although Héloïse does consider it attractive. It wouldn't kill me to sport a wee chin-sporran, I suppose. Here goes...

Héloise yelped in surprise. With an embarrassingly audible *boof*, a misshapen cloud of hair erupted from my scalp and face. *Well, so much for trying to do this without a visual frame of reference.*

As I struggled to shape the hair into something slightly more presentable, she giggled. "*Loup-garou!*"

"Not helpful, my dear." I muttered sourly. "Okay. Those settings turn me into a werewolf. Got it."

Little by little, I managed to get a decent handle on controlling the length and density of those wayward nano-fibres. Even so, there were still a number of unfortunate moments. By now, the crew were watching my antics with rather more than casual interest. I definitely caught DIGBY smirking after one particular incident with the eyebrows. It doesn't help that the control interface isn't quite as intuitive as I would prefer, although I'm fairly certain that any of the crew would be able to handle this blasted hair-growing business with disconcerting ease.

JUNO leaned forward, a sardonic smile on her face. She was clearly enjoying this, damn her eyes.

"I must say, that new style looks particularly splendid, Sir. However, I suggest twining a few smouldering cannon-matches into your hair and beard to achieve the full 'swashbuckler' effect."

I had to walk over to the viewport to get a better view of my latest effort. Hmmmm. Close, but not quite tidy enough to suit my own taste. I turned around to get Héloise's opinion, although her noncommittal shrug wasn't particularly helpful. *Comme ci, comme ça*. It seems there's more to this caper than simply being hairy. Mind you, a shaving mirror would have been useful at this point. I'm certain that there's a crate-load somewhere in *The Broch*'s storage inventory, but it's hardly worth the effort to drag one out. I've always shaved without using one.

Unbeknownst to me, IANTO had summoned a camera drone and positioned it facing the viewport. Obviously, this amused Héloise and the crew no end, as I could hear their stifled laughter and whispered comments as I struggled to control each new hairstyle. However, I was definitely gaining the upper hand now, and their comments became increasingly complimentary.

Finally, I found something that I can live with. An old-style Royal Navy 'full set'. One combined beard and moustache, neatly groomed in accordance with Admiralty regulations. Judging by her delighted reaction, Héloise found its allure more than adequate. So much fuss... All over a faceful of fuzz.

I breathed a heartfelt sigh of relief. With the Kharaa done for, we can safely return to the everyday business of getting the hell off this planet. I excused myself from the mess table immediately after finishing that ridiculously late breakfast, although I would have preferred to linger a while over a well-earned second mug of tea. Unfortunately, duty calls. There are still a few loose ends to tie up before we can safely call it a day. My first stop is the Bridge.

After settling into a chair, I opened a communication channel to *Kaori-san no-shima*.

"*Nĩ hảo*, Administrator Li. Selkirk here."

Li Huang's face spread into a delighted grin. He quickly tapped a pane on his comms panel, activating a video link with the other council members. Although Héloïse was still here in *The Broch*, her face appeared on the screen a few seconds later. Still eating a slice of toast, by the look of it.

"Good evening, ladies and gentlemen. The Kharaa infestation has been wiped out. It's over, on this planet at least." I said bluntly. "I'm uploading a transcript of our mission right now. Complete and unexpurgated. However, I should warn you that this data contains some highly disturbing images, so you may want to exercise some discretion regarding its release to the general population."

"We understand, Captain. What about Polyakov and his men? Are they still alive down there?"

"No, they were absorbed by the Kharaa a goodly time before we arrived. They ceased to exist as human entities from that point onward. As you'd imagine, there was absolutely nothing we could do to save them. On a personal note, I'd say that Justice has been fairly served today. The gravity of their collective crimes against your colony ultimately condemned them. For the record, I accept sole responsibility for administering extreme sanction upon Polyakov and his associates."

The committee nodded gravely in agreement. Although no-one would openly admit it, Polyakov's demise was something earnestly desired and long overdue, at least as far as most of the colonists were concerned. Judging by the variety of appalled expressions on their faces, I'd hazard a guess they were now taking a sneak peek at the mission video feed. I bided my time patiently, allowing them to come up to speed with current events. *Excuse me, folks. It's time for a quick tea-break.*

By the time I sat back down again, there were quite a few queasy faces on my monitor. Mme. Patel looked fit to burst into hysterical tears at any second now, and the rest were looking decidedly unsettled. Fair do's. They were adequately warned. This wasn't the sort of video that's best viewed with a nice tub of popcorn and a six-pack of Newkie Broon ale within easy reach. However, time was running away with us, so I remotely killed the committee's video feed.

"My apologies, ladies and gentlemen. I was rather hoping ye'd view that mess at your own leisure. A sight that's best forgotten at the earliest opportunity, I'd say." I admitted ruefully. "Now, just to cover the last few items of immediate business... Word of warning; me and the crew will be taking some down-time all day tomorrow. Maintenance and whatnot, ye ken? At 0700 on the following morning, DSV *Exodus* will collect all colonists in preparation for temporary transfer to our base. You will be able to return to *Kaori-san no-shima* within 72 hours. Please advise the colonists to leave all of their personal effects at your base, so that they can also be decontaminated. Any questions?"

The following morning, JUNO practically shooed Héloïse and I out of the base. When pressed for an explanation, JUNO replied that the crew were scheduled for maintenance and upgrades, and this rare spot of free time might be best enjoyed in a far more salubrious setting. I concurred, since Héloïse might not be entertained by the sight of her friends in various states of dismemberment. After breakfast, DIGBY's surprise gift of a finely-stocked picnic hamper more than clinched the deal.

A jug of wine, a loaf of bread and thou...

Disco Volante and *Artemis* haven't had a decent run in ages. With no real plan in mind at this point, I took Héloïse out to visit the *Aurora* memorial first. After conducting a sonar sweep of the area to ensure that no Reapers were lurking nearby, we exited our *Seamoths* and swam over to the monument. As we climbed out of the water, Héloïse gazed in wonder at the towering structure.

"I still can't believe that you have made this. *Magnifique!*" she breathed in awe. "To be alone with your grief is bad enough, but to bear that burden while working on this... " She shook her head. "Words fail me, *Chérie*. You are truly an extraordinary man."

"And you're an extraordinary woman. I could'na ask for anyone better at my side. Come on, Dear Heart, we'll go and pay our respects." I took her hand gently, and we slowly trod the short flight of stairs leading up to the monument's base. The first rays of dawn shimmered faintly on the horizon. I set down my backpack and withdrew a small flask of 25-year old single malt whisky. After opening it, I solemnly poured a goodly measure onto the nanocrete plinth, then raised the flask on high.

"To my old shipmates. May fair seas and a following wind guide you home at last. Rest ye easy." I passed the flask over to Héloïse. She took a hefty slug of that fiery liquor, then passed it back. I took the last swig and carefully stowed the empty bottle for later disposal. We stood quietly as the sun rose into view; our shadows cast onto the spire in silent communion with *Aurora's* fallen. Every year without fail I have visited this site in fond remembrance, although this time seems particularly poignant. With construction of *Borealis* back underway, this visit may well be my last.

Our observances made, we headed for the Shallows to begin what promised to be a day of blissful inactivity. It was unanimously agreed that any physical effort expended today should be entirely unproductive, and if possible, exquisitely pleasant to the utmost degree. A mighty fine notion.

By pure chance or unconscious design, we ended up in the exact location of my first permanent base on Manannán. Permanent, at least until it was pulverised by *De Ruyter's* mass-driver cannons. The crater seemed unremarkable now, as it was vibrant with sea life after little more than a century had elapsed. There was no wreckage at all, no physical reminder of that ghastly incident. Even so, I will carry the memory of that dark day into a fair chunk of eternity. That's the problem with having absolute memory recall. All it takes is one wee mnemonic trigger, and it all comes flooding back. Eventually, you learn to live with it. You do whatever it takes, or cave in and descend into madness.

My sombre reminiscences were abruptly cut short. The HUD flashed an amber warning.

+++ CAUTION. PROXIMITY ALERT. UNKNOWN LIFE FORM DETECTED. EXERCISE CAUTION. +++
An internal sensor sweep of the area revealed a fair amount of water displacement 120 metres out, dead in line with a dense Creepvine thicket. Whatever it was, it was moving at a decent clip and heading straight for us. I readied my repulsion cannon.

"Heads up. We've got company. One hundred metres, and closing fast."

"Any idea what it is?" Héloïse asked quietly, unclipping her cannon from its harness point.

"None, I'm afraid. Turbulence readings aren't that precise, although I can tell there's at least two of them now, and they're jinking about something fierce. Closest dynamic pattern match is a pair of Stalkers. I'd say that's worth a bit of caution on our part, but they're not exactly an unknown species. Hang on... They are definitely chasing something, and it's small. Here they come!"

There was a sudden commotion behind a large coral head directly in front of us. A minor maelstrom of sand and stones whipped up, partially masking the sleek forms of the Stalkers as they twisted and snapped at our mysterious visitor. Obviously, it had gone to ground somewhere inside the coral head, and they knew precisely where it was hiding. On any other day, I wouldn't have stepped in to rescue a prey species, Circle of Life and all that. However, this new creature had me intrigued. Although its life signs are barely detectable at this distance, one thing was absolutely certain. It was utterly terrified. Understandable, but a rather atypical depth of emotion from your average fish. Puzzling.

"Quietly now. We'll sneak up on them from either side. Twenty per cent, tight beam, rapid pulse."

We swam toward the coral head, hugging the bottom's contours for cover. Ten metres away from the base of the coral head, Héloïse and I split up. The Stalkers were too engrossed in raising a ruckus to notice our moderately stealthy arrival.

"In position." Héloïse murmured.

"In position. Let's boop some Stalker snoots."

We fired simultaneously, hammering the Stalkers at 10 cycles per second. Although this fusillade wouldn't permanently maim them, those Stalkers will have a lifelong aversion to deep tissue massage after this day's work. Roughly equivalent to a barrage of squash balls... Fired from a Bren gun.

Not surprisingly, they both turned tail in fairly short order. After making sure they weren't about to double back on us, Héloïse and I swam cautiously towards the coral head. I re-clipped the cannon on my harness and started scanning the outcrop. Héloïse patrolled the area as I searched for the creature, her repulsion cannon now dialled up to its maximum setting. Just in case. For my part, I wasn't having much luck in pinning down the creature's location, as it kept moving around inside a maze of small tunnels that honeycombed the sandstone beneath. I was learning an awful lot about the composition of this particular coral head, but not much else. Naturally, a certain element of frustration began creeping into this increasingly fruitless exercise.

Just as I conjured it was time to leave, the creature popped out of its hiding place.

It's totally unlike anything I've seen. If someone had left an amorous miniature pug and a like-minded squid alone with candle lighting, Champagne and soft music, this is probably the end result.

It's a stubby wee thing, not much longer than my forearm. It has drab grey skin on its dorsal aspect and a faintly luminescent white underbelly. A pure white stripe runs from its blunt snout to a tubby and slightly warty thorax. Five tentacles are arranged in a radial pattern below the thorax. Large, soulful eyes, stumpy pectoral fins and a cheerful mouth filled with tiny, pebble-like teeth complete this totally unexpected package. *Manannán* never ceases to amaze me.

There was a brief moment of uncertainty between us. The creature obviously wanted to approach us, although I suspect that he or she was still spooked after its run-in with the Stalkers. Perfectly understandable. I plucked a passing Peeper out of the water and held it out to the beastie, hoping to lure it closer. To my surprise, the creature practically grimaced in distaste and turned away. Since there are no crustaceans or shellfish on this planet and its mouth isn't designed to munch on coral, it's most likely to be a herbivore. A quick scan should sort this chap out.

Moving carefully, I unclipped my hand scanner. This wouldn't be quite as threatening as using my own onboard systems. After all, I'm trying to appear as friendly as possible. The scanner hummed, emitting its complex patterns of multicoloured light. As expected, the creature cringed fearfully and shot back into its hole. However, it seemed to realise that it was in no danger and emerged from the coral head a few seconds later, watching the play of the scanner's beams with rapt attention.

And then, the damndest thing happened. It smiled. An unmistakeable expression of sheer joy lit up the creature's face. With an endearing chirrup, it scrambled out of the hole and began to cavort in the scanner's beam. Héloise swam closer to get a better look, and her involuntary squeal of delight almost overloaded my audio receptors. Suddenly, I found myself staring at her inverted face.

"It's adorable! Can we keep him.. Her?" Héloise implored. "Please, *Chérie*?"

The scanner beam cut off. Our little friend ceased chasing the pretty lights, its cheerful grin fading into a faint, yet expectant smile. JUNO's voice read off a litany of the creature's physical attributes.

"Chordate cephalopoid, species unknown. Herbivorous. Intelligent. Life stage, pre-juvenile. Gender, male. No apparent physiological or genetic congruence with any other known life forms of 4546B. Potential evolutionary nexus. Inferred threat level: Harmless. Creature appears to exhibit a marked affinity for other non-predatory species. Observations indicate a predisposition towards sociable behaviour, mimicry and empathic response. Designation requested for new species, please."

Ah. That's the Billion Credit Question.

We spent the best part of an hour wrangling with this one. Meanwhile, the mysterious critter amused itself (and us) with an exuberant display of aquabatics, drawing surreptitiously closer as its confidence increased. '*Pentapod*', '*Pugsquid*' and '*Polypuss*' were the first names to get canned, mainly because they didn't do this happy little creature justice. Likewise, we gave any thoughts of a fancy scientific name a wide berth. It's basically a cute fish, end of story. How hard can it be? Cutefish. There. It's official. Sorted.

"I shall call him *Minou*." Héloise declared.

For his part, the Cutefish seemed completely oblivious to this momentous decision. I was baffled.

"*Kitty*? You're calling him '*Kitty*'? I'll admit, there's a vague bit of cat in the look of him, although I'd conjure his face looks more doggish than anything else. As a potential animal companion, I'd say

he's more of a *Milou* than a *Minou*, going by his antics." Héloise offered me a blank look. "Sorry. It's an old Earth comic book reference. Got the whole series on chip. I'll have to show you sometime."

Well, *Minou* certainly likes to play. That much has been safely established. He is currently swimming lazy circuits around our heads in an Infinity loop, occasionally varying the pattern with a spiralling 'windmill' display, tentacles outstretched. The little creature stayed just out of reach, and no amount of gentle come-hither gesturing could persuade him to come closer. At a guess, I'd say he's playing it safe until he's absolutely certain we're harmless. Héloise is completely smitten by it, and I can't say as I blame her. There is something essentially endearing about Cutefish behaviour; it's almost as if this charming and inoffensive critter is busting a gut to become your best mate.

Naturally, I tried to fathom some sinister ulterior motive lurking behind its comical capering. At least one known native species tries to weasel its way into your head, so it wouldn't be a huge surprise. The Mesmer is particularly nasty in that regard. Pretty patterns and subliminal suggestions lure you in all nice and close, and then it lunges forward for an Acheron Kiss. Goodnight, Jimmy.

Thankfully, this Cutefish hasn't displayed any aggressive behaviour at all. In fact, its goofy little smile is a refreshing change from something that looks like the business end of a chainsaw. Unfortunately, that description applies to 99.98 per cent of all life on *Manannán*.

"I've got an idea. Wonder if he'd go for a nutrient block?" I had a couple stowed in a harness pouch. I withdrew one and glanced at its packaging. 'Soya-Lentil Crunch'. Not a huge favourite of mine. Not a huge favourite of any sentient being in The 'Verse, if the whole truth be known. Perfect.

After peeling back its wrapper halfway, I offered the nutrient bar to the Cutefish. It approached cautiously, sniffing the water expectantly. Without warning, it darted forward and snatched off a tiny bite, retreating to a safe distance again before chewing the morsel. His response to this particular item of Terran food was surprising, to say the least.

An ecstatic smile blossomed on his face. He hung suspended in mid-water, rotating slowly in a vertical posture as if the very Light of Heaven were streaming down upon him. Héloise and I exchanged puzzled glances. Apparently, he was enjoying that wee nibble something fierce. As soon as he finished chewing, *Minou* fixed his gaze on the remainder of the bar, grinning hopefully.

More, please!

The offer of food clinched the deal. Soon, we were able to scratch his chin and tickle his belly to our heart's content, and *Minou* seemed to be enjoying every minute of it. He's definitely a 'keeper'. My PDA communicator chimed softly.

"JUNO here, Captain. I wish to report that all personnel are back online. Modifications successful."

"Glad to hear it. If you've got nothing else planned this afternoon, perhaps you'd all like to join us for a spot of R and R? We're heading over to *Borealis* to take a stickybeak at how she's going. Interested?"

"That sounds like an excellent idea, Sir. I shall inform IANTO and DIGBY immediately." JUNO replied.

"Oh, by the way... There's an added incentive. I'll leave its exact nature as a surprise. See you soon."

"Very good, Sir. Consider our curiosity suitably piqued." JUNO chuckled.

We returned to our *Seamoths* and set out for the construction dock at *Skull Island*. Eventually, *Minou* shied away as he neared the submersibles, and it took a fair bit of coaxing to get him to approach any closer than 20 metres. To a wee chap like him, they would have looked every bit as menacing as a pair of Stalkers. However, once Héloïse climbed into *Artemis* and waved at him, he must have twigged that the subs were safe to approach. Chirruping happily, he shot over to *Artemis* and began examining this strange new beast. As I watched him, I couldn't help but wonder how intelligent this creature actually is.

IANTO's probably far better equipped to analyse Cutefish behaviour than I am. My downloaded theoretical knowledge in xenobiology and behavioural science is sound enough, although I'm still susceptible to the old human knack for seeing near-human character traits in most animals. Call it a cultural weakness if you like, but it's hard to argue with over two centuries worth of funny animal videos. Believe me, billions of InfoCortex users will go bonkers over this little fellow's antics.

As far as I'm able to determine, Cutefish exist for the sole purpose of having fun. When they're not feeding, resting and (presumably) making teeny-tiny Cutefish, they appear to expend a considerable amount of energy by simply enjoying themselves. At the risk of going out on a limb here, I conjure that the sudden appearance of the Cutefish may be a subtle test posed by *Father of Tides*. Any animal that actively seeks out larger organisms for protection usually has something to offer in return. Back on Terra, tiny 'cleaners' such as wrasse and shrimps remove parasites and dead skin from larger fish. It's a mutually beneficial arrangement that works quite well. However, all that a Cutefish can 'do' is perform funny tricks, in return for our company and presumed protection. Unsurprisingly, this charming behaviour doesn't work on Stalkers. I guess that's the nature of this hypothetical test. As final confirmation of our stated intent, it's entirely possible that we are being judged by how we treat the very least of this planet's creatures. It's a bit of a stretch, I'll admit.

I swam over to *Disco Volante*. Just as I was about to enter the cockpit, *Minou* detached himself from *Artemis* and darted over to me. His little smile seemed to wane slightly as he sensed our departure. I beckoned him to follow us. *Minou* cocked his head quizzically, staring at my upturned palm as if uncertain of what he should do. With a resigned sigh, I held my right hand up as if to wave goodbye. He responded to this gesture with a delighted, giggling spin and a crisp high-five. That will do nicely. A construction dock probably wouldn't be your first choice as a picnic spot. However, we managed to find an unoccupied berthing platform on the port side of *Borealis* and set up camp there. Most of today's onsite activity was centred around the starboard midships and stern sections, so I figured our lunch would be relatively uneventful. By 'uneventful', I mean not being in the wrong place when a *Ripley* strolls by carrying a 20-tonne pallet of titanium ingots. That will generally ruin your day. Rather than mess around with the drone logistic commands to accommodate our personal whim, it seems more far reasonable to stay well out of harm's way. This is a working shipyard, after all.

Borealis has taken on a definite ship-like appearance since we last saw her. Less than three weeks ago, the keel was barely beginning to sprout ribs. During the Kharaa crisis, the drones had been beaver-ing away tirelessly, working totally unsupervised for the majority of that time. Their orders have been clearly defined and there is no shortage of raw material. Apart from their scheduled maintenance breaks, the drones have been fabricating structural girders and external hull panels ceaselessly, working against an inexorable deadline dictated by *Manannán*'s cyclic weather systems. In a little more than a month's time, the first signs of bad weather will start creeping in. We might get a couple of week's grace between hard blows for the first six months, but I wouldn't bank on it. When *Manannán* reaches perihelion, hurricane season digs its heels in good and proper. For the best part of a Solar year, in fact. That's time enough to become heartily sick of your favourite leisure activity. Time enough to turn a casual offer of another game of *Monopoly* into a full psychotic breakdown.

... And that's when we take the whole boat show down to full fathom five.

As soon as the outer hull is completely water-tight, the entire construction dock can be submerged. According to the production schedule (projected in glorious 3D for our perusal), the neutron accelerator silos salvaged from Aurora are being installed today. All the more reason to stay as far away from the action as possible. They're perfectly inert at the moment. Not a trace of stray radioactivity to be found in any of them. However, each silo weighs in at 120 tonnes, and there's going to be some heavy machinery swinging them around like a PT sergeant's Indian clubs. Once they're installed, additional shielding will be added to their outer casings and the surrounding engineering compartment. As far as RADSAFE is concerned, there's no such thing as minimal protection. Plenty of shielding will be placed where it's needed most. We can afford that luxury.

Speaking of shielding, I've come up with a contingency plan that I'm not terribly proud of.

There is always a distinct possibility that the Precursor cannon cannot be deactivated. My next major obstacle is convincing the entity known as *Sky Watcher* that we have permission to leave this planet, as granted by *Father of Tides*. I believe that this process may not be as simple as telling the cannon's Precursor AI that it's perfectly okay with the Big Boss, and we'll be toddling off now. No bloody way.

It's going to involve another face-to-face encounter, just like that time with *Keeper of Memories*, only I've got this *Sky Watcher* pegged as the type who can't be talked around. An impeccable absolutist. Whatever conditions he needs met before granting us access to the weapon's controls, well... We're just going to buckle down and tick every single box that needs to be ticked with good grace. Too gorram close to escaping this planet to run afoul of some niggling Precursor technicality.

Although we've beaten the Kharaa hands-down, there are still no guarantees of safe passage. *Sky Watcher* is the unknown variable in this equation, and I've been figuring out the safest way to deal with any potential lack of cooperation when *Borealis* is finally ready to launch. We'll play it safe and try the direct approach first. Since we have no way of knowing what scanning technology *Sky Watcher* uses, its effective detection range or trigger threshold, we'll have to feel our way through this situation very carefully. It's quite possible that *any* contact with the Kharaa contagion is enough

to reactivate the planetary defence system. Infection leaves subtle traces in human body chemistry. Marker proteins, elevated white cell counts or neutralised fragments of the organism itself clearly indicate if an individual has been exposed to specific pathogens. As far as we can tell, all of the colonists are now free of the Kharaa infection. However, *Sky Watcher* may see it otherwise.

The abiding presence of the Precursor energy weapon isn't the only threat we face. As I discovered more than a century ago, Warperts are also capable of killing starships. To this end, I am equipping *Borealis* with tau-meson shielding, reverse-engineered from the system used to keep *Father of Tides* confined in the *Lava Castle* prison. Warper fields cannot penetrate a tau-meson barrier. This much is known. The Precursor cannon is another matter entirely. I can't even conceive a shield technology capable of withstanding a single shot from that weapon, let alone a constant barrage. Since the gun draws its power from a planetary energy network, it's quite possible that *Sky Watcher* would keep ramping up the juice until *Borealis*' shields collapsed. We certainly wouldn't break atmo in time.

My contingency plan for the Precursor gun is brutally direct. *Borealis*' mass-driver batteries will be trained on that gun emplacement as soon as they become operational. If that weapon so much as twitches during launch, we will blow it to pieces without the slightest hint of hesitation. I briefly considered using a low-yield nuke instead, although I conjure this planet has suffered enough from that form of technology. Naturally, there is a distinct possibility that *Sky Watcher* would simply generate another cannon to replace it, and then we're back to Square One. To make matters even worse, we have no way of knowing how many of those weapons *Sky Watcher* can effectively control at once. Once we cross that particular line, our chance of survival drops like a paralysed falcon.

Without warning, Héloise playfully swatted my bum with her Guardian knot. A decent *thwack*, too.

"Hoy, *meneer*! - Enough with the thousand-metre stares! *J'ai faim, mangeons*! Picnic time, now!"

"Sorry, love. I was awa' with the pixies again. Yon mucking great gun is doing my head in."

She grinned in that glorious dark way of hers. "You could always blow it up, you know."

I nodded, sucking air between my teeth. My gaze returned to the general direction of Pyramid Rock.

"That possibility is still very much on the table, I'm afraid. Unfortunately, there's no way of telling how the natives will respond to the attack. My gut tells me that's not a good idea. By the by, it also says it wouldn't mind a wee bite of something out of DIGBY's smashing tuck-box. Between you and me, I'm nicely inclined to that train of thought right now... Let's dig in."

Rather than settle for dainty mustard and cress sandwiches or a burly ploughman's lunch, DIGBY had pulled out all stops to provide our picnic luncheon. He had created an amazing *o-bento* meal, with both hot and cold components, all skilfully executed. There was a breathless moment of admiration, then our respective stomachs made their demanding presence known. It really was a shame, considering the exquisite level of craftsmanship DIGBY had devoted to each ingredient. However, these works of art *were* intended to be eaten. After an unspoken apology to our own Iron Chef, we reverently picked up our chopsticks and began eating.

Halfway through a delicious smoked Peeper *norimaki*, my PDA communicator chimed. JUNO.

"Go ahead, JUNO." I mumbled, "Sorry about that chewing noise. You caught me with a mouthful."

"My apologies, Captain. How's everything going up there?" JUNO inquired.

I swallowed the last mouthful quickly before replying. "Splendidly. Please convey our most sincere compliments to Chef DIGBY. You really should come up and join us, you know. There's still plenty to go around, and we haven't even reached the halfway point yet."

"We intend to do so momentarily, Sir. I merely called in ahead of our arrival, based on a probability that you may have been... Otherwise engaged." JUNO said tactfully.

Héloise immediately burst into a fit of laughter. "I had no idea that androids could be so prudish, *Chérie*. Forgive me, but that is *soooo* funny!"

"Now, lass. Settle." I chided. "I know most Belters wouldn't bat an eyelid when they've barged in on an intimate situation, but my crew have a well-developed notion of courtesy. I appreciate their concern. There's nothing quite like an audience to throw a spanner into the romantic works."

"*C'est vrai*." Héloise admitted. "Belters also like to make fun of unskilled lovers. Very loudly."

Fifty metres out, the water began to boil. Instantly, *Minou* flew into a mad panic, leaping clear of the water in a frantic attempt to flee this unseen threat. Héloise caught the Cutefish deftly in midair and cradled him gently in her arms, cooing softly to ease his terror. I immediately thought that this would end badly for the little fellow, and looked around for a suitable container to put him in. The only thing immediately handy is the thermo-electric cooler box, so I removed the rest of the food and descended to the lower platform to fill the chest with seawater. The cooler has an internal volume of 60 litres, which is more than enough to keep *Minou* happy, well and wet. It should do, at a pinch.

Aegis broke surface with a roar and *whoosh* of spray, throwing a glittering cascade of water from its conning tower and flanks. Presently, I saw JUNO, IANTO and DIGBY leaving the forward lockout hatch. IANTO and DIGBY carried another cooler chest between them as they swam, undoubtedly containing more delicacies for what was now, high tea time. Roughly two and a half hours remained until sunset. Well, we've got a big day coming our way tomorrow. We might as well enjoy this rare moment of unencumbered free time.

Minou soon found himself the centre of attention, and he is positively lapping it up. The Cutefish appears to be quite comfortable paddling about in our cooler chest, occasionally raising himself out of the water to receive a tickle under his chin. IANTO's completely fascinated by this creature, but his scientific curiosity is no match for those soulful, highly expressive eyes. He's just as smitten as the rest of us.

"Captain, may I have your initial data on this creature?" IANTO asked. "I'm uncertain whether this species is a transitional phase of a previously encountered creature, or an entirely new evolutionary direction... It shares the same triple-helix DNA configuration as other life on this planet, although there are some rather puzzling anomalies that will require a more thorough examination, preferably performed under controlled conditions."

When IANTO mentioned the word 'examination', Héloïse bristled defensively. I gently squeezed her hand and whispered that *Minou* would be entirely safe during IANTO's investigation. Word is bond.

"*Nyet problema*, mate. There you go." I shot a data-burst of the Cutefish biometric analysis to IANTO. "Now, you mentioned anomalies. What sort of anomalies are we talking about here?"

IANTO looked uncertainly at *Minou*. "First of all, his dual respiratory systems, Sir. This creature is also capable of obtaining oxygen directly from atmospheric air. Secondly, after reviewing your data, I am convinced that his potential level of intelligence is rather higher than one might first suspect. Far beyond simple mimicry of actions and elaborate swimming tricks, in fact. It responds to pleasant stimuli in an intelligent manner and actively seeks out 'friendly' company, which is highly unusual for any life form we've encountered here. The fact that such a creature has apparently evolved spontaneously is utterly inconceivable. Given that evolution needs hundreds of millennia to achieve this level of biological sophistication, Cutefish shouldn't even exist. Frankly Sir, I'm stumped."

"I sense the fine hand of *Father of Tides* at work here. Ballpark guess... How smart do you think he really is?" I prompted.

"I can only offer pure conjecture at this point, Sir. Assuming that *Minou* is a representative specimen of the species, my initial evaluation places Cutefish somewhere between chimpanzees and dolphins, at least in terms of demonstrated intelligence levels. A most remarkable creature in all respects."

As if to underscore IANTO's assessment, *Minou* spread all five tentacles to grip the rim of the cooler, then started playing a game of peek-a-boo with anyone who cared to join in. Every time he popped up in front of someone, he chirped and gurgled at them until he was rewarded with a tickle or a gentle head rub. Occasionally, someone would feed him a small morsel of vegetable matter, which he appeared to enjoy immensely. As far as the history of Terran space exploration is concerned, I'd be hard-pressed to find anything remotely like how we've spent this particular afternoon.

Okay, Spacers... I'll see your golf practice on Luna, and raise you four androids and a human taking high tea on a starship construction dock, with a giggling alien squid as a centrepiece. We have our Alice, but there's a wee shortage in the white rabbit, dormouse and Mad Hatter department.

As they say, strange things happen at sea. We're getting quite used to it.

We returned to *The Broch* shortly before midnight. Héloïse turned in to catch a few hours of sleep, leaving me and the crew to prepare temporary accommodation for the colonists. Although there is more than enough free space in here to nanolathe separate habitation modules for each family group, it seemed far more practical to create a dormitory arrangement and erect privacy screens between each set of bunks. At some stage fairly soon, *Borealis* will be fitted out with proper accommodation berths, and everyone will be living aboard her during the final stages of

construction. Unfortunately, this means that their base on *Kaori-san no-shima* will have to be dismantled, along with most of the other Terran installations on the planet.

I say 'most'. I plan to leave one base fully functional. *The Broch* will remain as an emergency outpost, and I'll be installing a cache of advanced survival gear in the base pedestal of the *Aurora* memorial spire, along with a fully outfitted *Seamoth*. If any poor sods find themselves stranded on *Manannán* in future, I'm making damned certain that they'll make it through the ordeal in one piece, if not in a certain degree of style and remarkable comfort. By all means, feel free to play Robinson Crusoe to your heart's content, if that strikes your fancy. I guarantee you'll be popping out to raid that cache inside a week.

By 04:00, everything needed for the personnel transfer had been loaded into *Taranis*. After a quick jolt of coffee and a final review of our game plan, we saddled up and headed out to *Kaori-san no-shima*. The broad plan is to decontaminate the transport sub *Exodus* first, then send the colonists through a series of decontamination spray races prior to boarding, clothes and all. The mixture we're using is perfectly safe for contact with human tissue, although it's still potent enough to rip the living crap out of Kharaa DNA. As for the base and its contents; a far more powerful version is being used to sanitise the colonists' goods and chattels. Naturally, there's going to be the inevitable dolly or teddy bear coming through with wee colonists, but that will be sorted with minimum fuss.

"*Kaori-san no-shima* control, *Taranis* requesting docking clearance."

"Good morning, Captain Selkirk." Savini replied. "*Taranis* is cleared to proceed. Welcome aboard."

"Thanks, Enzo. How are you feeling today, laddie? You took a fair beating back there, but stayed the course regardless. That was fine job of work, by the by. Anyway, I hope you're mending well."

"I'm still a bit wobbly, Captain. But other than that, I'm basically fine. Thanks for looking after us."

"Nae problem, lad. JUNO and the others did all the real work. I just sat around barking orders."

Savini's hologram grinned wryly. "That's not what I've heard, Sir. You all did some pretty wild stuff down there, didn't you? Héloise told us a swarm of Kharaa warriors had invaded the base."

I rubbed the back of my neck sheepishly. "Aye. There were a few hectic moments, I'll give you that."

Savini leaned forward conspiratorially. "Don't suppose you have any vid-feeds you'd like to share?"

I chuckled. "Only if you don't feel like sleeping for the next decade, mate... Catch you later, okay?"

While the crew were setting up personnel decontamination stations in *Exodus*' dry maintenance bay, I started work on making the transport sub squeaky-clean inside and out. We have concocted two versions of Enzyme 42 specifically for this task. The outer hull mixture was by necessity far more concentrated, suspended in an inert gel designed to dissolve slowly in contact with seawater. By the time we return to *The Broch*, the exterior of the transport sub should be free of all traces of Kharaa

contagion. Just in case, there's another automated spray race set up at the receiving end. I know this all sounds like a masterpiece of clean-freak paranoia, but we have to be absolutely certain that every last strand of Kharaa DNA is obliterated. Sure as the turning of the worlds, any shortcuts taken in this part of the process will return to bite us in the arse.

I climbed into the spray rig's exo-frame and fired it up. Aye, this one is purpose-built, as you've rightly guessed. Two hundred litres of Enzyme 42 concentrate and a high-pressure spray lance is a bit too much to lug around, and I don't feel like tripping over a hopeless tangle of hoses today. I guided the exo-frame into a telescopic service cradle, and extended its boom arm over *Exodus*. From this position, I could easily reach any point on the upper hull with the spray lance without fear of toppling off. This gel is fiendishly slick, and a nasty fall is something I'd rather avoid if I can help it.

The upper hull took ten minutes to cover thoroughly. A quick scan of the coating in the UV spectrum revealed a couple of patchy spots around the forward thruster nacelles, so I gave each one an extra dose to make a good job of it. Even so, that's something we'll have to watch immediately after launch. Now that all thruster turbines are nicely gooped up with E-42 gel, power will have to be applied sparingly until the worst of that mess has dispersed. Don't want a repeat of that unfortunate business with Crabsquid puree, do we?

Not looking forward to this part. I dived into *Exodus'* onboard systems and activated her graviton lifters. The sub rose three metres into the air and hung suspended. Although everything checked out stability-wise, there wasn't a hope in hell of getting me to stand underneath her. There's old divers and bold divers... Still, I should be able to get a clear shot at her undercarriage without putting myself in harm's way. Nothing wrong with a little prudence, particularly when it involves fifty-odd tonnes of submersible floating on little more than a complex series of mathematical functions and happy thoughts. The Uncertainty Principle does have practical applications, after all.

With a considerable degree of relief, I lowered *Exodus* to the deck half an hour later. So many nooks and crannies to deal with, and only so many ways of attacking them with the sprayer's jet. Yes, there were a couple of tense moments as I ducked under the hull to reach some tricky spots. Even though I had complete control of this situation, I am firmly convinced that I may have watched far too many 'Roadrunner' cartoons for my own good. That was a 'coyote moment' waiting to happen.

By comparison, the sub's interior was an absolute doddle to decontaminate. All I had to do was couple a tank of the aerosol mix to the life support systems, and simply let it circulate for twenty minutes. This mix is designed to be highly volatile, creating a dense cloud of E-42 vapour as it expands in contact with normal atmospheric air. As it's non-flammable, there's no danger of a flash-fire if it should come in contact with a wayward spark, although I'll definitely have to change the air-scrubber cartridges after this procedure. Bless his little neoprene diving booties, IANTO did his best to clean up the smell of this compound... But it still smells like a cow's fart in a pine forest. Damn.

CHAPTER ELEVEN

All things considered, the transfer of colonists went surprisingly well. There were a few minor incidents along the way, thankfully made manageable with a few well-chosen words and a ready smile. I have to admit, there were a few worried faces as we assembled the colonists at the head of the decontamination setup. It looks a mite intimidating, and there's probably some echoes of past infamy associated with herding people through a facility such as this. Having been a human in a previous life, I'm fully aware of how deep those mental scars can run.

One thing is absolutely certain. The colonists need to be told what to expect. This version of the E-42 aerosol is suspended in a flash-evaporating fluorocarbon solvent that IANTO cooked up specifically for this application. Perfectly safe for contact with human tissue, but it does have one unfortunate side effect that won't endear it to anyone on the receiving end of this process.

It's a wee bit nippy. Negative 45 degrees Celsius, to be precise.

Of course, this sensation of intense cold is only momentary. To alleviate any physical distress, the final section of the spray race is equipped with heated blowers to take the chill out of your bones. Even so, it was obvious that a practical demonstration was required before anyone would enter. Unfortunately, any one of us androids wouldn't suffice, as I quickly discovered. Went through the whole process twice, in fact. Considering the amount of sound and fury that this rig generates, I'm not entirely surprised.

I smiled winningly at Héloïse. She muttered something remarkably obscene in Cantonese, squared her shoulders and set off through the decontamination tunnel. As she disappeared into the swirling clouds of aerosol vapour, I heard her stifled yelp of surprise as the full blast of the spray jets kicked in. Seconds later, the fans roared into life. This time, Héloïse was rather less restrained in her reaction to cryogenic shock. Suffice it to say, the storm of Belter curses that ensued was loud, highly inventive and entirely unprintable. Rather than dismay the colonists, this outburst provoked gales of bawdy laughter. At my expense, I might add. Something tells me I might have to wipe out another Kharaa hive single-handed to regain any semblance of dignity, particularly after this little episode.

Oh aye, the trip back to *The Broch* was such jolly fun. After the initial shock of decontamination, most of the colonists seemed to think it no worse than an unusually rigorous *banya* session. Granted, the icy dip came *before* the toasty-warm sauna part and there was a conspicuous absence of birch twigs. On the whole, our passengers settled down nicely afterwards. Well, aside from a trio of shrieking toddlers who could not be pacified by anything JUNO or I could say, do or offer. According to one of them, we are now officially Nasty Robots. Well, we'll just have to live with that.

One of the positives of being an android is an innate ability to filter out certain audio frequencies.

Smiling pleasantly to myself, I activated the sub's entertainment system and selected a fluffy Mozart piece to pass the time. Considering the level of suffering those wee howler monkeys are currently inflicting on our passengers, I should either select one of the Death Metal golden oldies as the next track, or flood the entire compartment with Anesthazine gas. Decisions, decisions...

"Ladies and gentlemen, please be advised that we are now on final approach. I remind you to remain seated while docking manoeuvres are in progress. After disembarking, please proceed directly to the central atrium for a short safety briefing and accommodation assignments. Refreshments will also be provided. Thank you."

As *Exodus* neared the lava massif that concealed *The Broch*, holographic navigation beacons activated, marking the entrance to the moon pool access tunnel. An obvious sign that our base defence system has interrogated the submersible's IFF transponder and received an appropriate response. Docking request granted, minus a somewhat pointed flash-bang-boom refusal. This is generally reserved for any unwelcome guests, either human or xeno. As you might expect after the *De Ruyter* affair, I became considerably more particular about letting random bodies stroll into any of my bases unannounced.

However, this wasn't the case with these colonists. With Polyakov and his cronies dead and gone, I have no valid reason to anticipate any further shenanigans from the Belters. Naturally, I've taken adequate measures to ensure that certain parts of *The Broch* are tightly secured, although it's more from a civilian safety perspective than anything. There are quite a few wee bairns among this lot, and we don't want them fiddling with things well beyond their pay grade. Code-locked doors and a plethora of nasty warning signs should be quite sufficient. Fusion reactors are *definitely* not toys.

Exodus surfaced in the moon pool, wallowing gently for a moment or two. I waited until the worst of its motion had subsided, then activated the graviton lifters. The submersible rose smoothly out of the water, rotated 180 degrees and slowly reversed toward its docking collar. Rather than subject our colonists to the moon pool's high atmospheric pressure, followed by a lengthy decompression sequence, this transfer would take place with a minimum of fuss. Considering how some folks reacted to the decontamination procedure, stress levels are running pretty high at the moment.

Yes, I admit that I've become a proper old mother hen lately, but considering what lies ahead, I have no bloody choice. Once *Borealis* reaches deep space, we're facing a 50-year trip back to Terra. Believe me, you don't want to start something like that unless everyone aboard is in full possession of their marbles. Morale is everything at this point. Putting everyone into cryo-stasis for the full duration of the trip isn't a viable option either, since significant synaptic degradation occurs after five years or so in deep freeze. Science hasn't licked that problem yet, unfortunately. To play it safe, the colonists will be cycled through a four years-in, one year-out cryo schedule to allow their bodies sufficient time to repair any physiological damage that may have occurred during cryosleep.

Naturally, the crew and I will be on watch for the full duration of the voyage. You lucky buggers.

With IANTO and DIGBY still working on *Kaori-san no-shima*, it fell to JUNO and me to get the colonists all sorted out. Fortunately, we were using a simple RFID tag system linked to their PDAs. Each colonist is issued with a tag that leads them to their assigned berth, and family groups can be accommodated with a quick application of the Builder tool, if required. The whole process took us slightly less than fifteen minutes to complete. All up, that sudden burst of activity wasn't particularly harrowing, but that didn't stop me from heaving a deep sigh of relief when it was finally over. There's just enough time to grab a quick brew, and then it's time to welcome our guests aboard.

I felt it prudent to wait until the colonists had finished their breakfast. The autogalleys were still doing a fairly brisk trade at the moment, so I allowed myself the luxury of a second mug of tea. I looked up and noticed Héloïse circulating among the tables at the far end of the atrium, chatting amiably with her friends and colleagues. Rather than barge in and interrupt her conversation, I stood and waved to attract her attention. Thankfully, her foul mood seems to have abated somewhat, at least according to her cheerful smile as she waved back in reply. A few minutes later, Héloïse plonked herself down beside me.

"All is forgiven, then?" I asked cautiously.

She laughed delightedly. "*Oui*. I had no idea it would be so cold going through that shower! What the hell did you expect me to say, *Chérie*?"

"Under those circumstances... Well, pretty much anything, I suppose." I admitted. "I take it your comment about 'freezing it and snapping it off' was an entirely spur of the moment thing?"

"You might say that. Anyway, now that you've dragged us down to your dark and foreboding lair... What's the plan, my Captain?" Héloïse grinned, helping herself to a round of my toast and jam.

I shrugged. "There's nothing actually planned for them at this stage. Consider this a three-day sleepover or holiday, although your people could organise some festivities if they feel like it. We've got an open house policy here, so feel free to do whatever you want. Within reason, of course. Obviously, our *Cyclops* and *Seamoth* fleets are completely off-limits, unless one of the crew is in command. That means no unsupervised joyrides, I'm afraid. That reminds me... Looks like breakfast is nearly over. I'd best let everyone know our house rules before they start wandering off."

I stood up and straightened my jumpsuit as befits a proper Captain, then amped up my voice-box.

"Ladies and gentlemen, your attention please. First off, welcome to *The Broch*. I sincerely apologise for any inconvenience or discomfort you may have experienced during this temporary relocation. The decontamination of *Kaori-san no-shima* is proceeding as scheduled, and you will be able to return in three day's time. In the meantime, you are most welcome to avail yourself of our facilities. However, please be aware that certain areas have been secured against all unauthorised access. These areas contain critical equipment such as power generation, life support, vehicle bays and base defence systems. Crew quarters are also off-limits, and I ask that you respect our privacy. Should you require assistance with any matter, please use one of the base information terminals or directly contact a crew member. In an emergency situation, use any one of the terminals to sound an alert, and the crew shall respond immediately. As a general reminder, our autogalleys may be used at any time, and a wide range of entertainment media is available for your enjoyment. Please make yourselves at home. *Spasiba*."

A wee bit long-winded, I'll admit. However, I could only hear appreciative murmurs among the colonists, and not one whisper of dissent. Outstanding. Presently, the general hubbub of clattering food trays and departing diners began tapering off. I gulped down the last mouthful of tea in my mug, gave Héloïse a heartfelt hug, then jogged off to the bridge. Captain time. The Big Chair awaits.

"Sir! Sonar contact, bearing zero seven-one. Range, two thousand, two hundred metres. Depth, three seven-five metres. Speed, fifteen knots. Target is confirmed as biological."

"Very good, Mister Savini. Set base to Condition Yellow."

"Condition Yellow, aye Sir. Repulsion turrets are online. Torpedo loads are set to Concussion."

I nodded. "You are cleared to launch upon confirmation of target motion analysis. Weapons free."

"Target motion analysis is complete, Sir. Acoustic signature confirmed as Reaper Leviathan, designation: 'Binky'. Firing solution is locked in and tracking on launchers Charlie and Delta."

"Copy that. Set Condition Amber. Proceed, Mister Savini."

"Condition Amber, aye. Target aspect has changed. Speed, twenty-five knots. Approach vector is now zero niner-five, range nineteen hundred and closing."

"I'd say he's coming in for a closer look, wouldn't you?" I said calmly. "What's the current status on that repair crew working over Blood Kelp Canyon way?"

"All divers retrieved and onboard within seventy-five seconds of recall, Sir. *Esperanza* is already underway. *Esperanza* commander is re-routing to West docking port, as per emergency protocol. ETA to *The Broch*, twelve minutes."

"Good. That should keep them out of the line of fire. Our friend Binky is coming in hot and strong."

"One thousand metres. Firing solution is good. Launchers are locked on target. Eight hundred metres... Firing. First salvo away, running straight and hot. Time to impact, thirty seconds."

Suddenly, the seabed motion sensor display lit up. A hazy mass of life forms had materialized only six hundred metres out from *The Broch*, and they were definitely on the move toward us.

"Repulsion turrets E-5, E-6, E-7 firing on automatic proximity detection. Negative contact with target on both torpedoes. I say again, negative contact with target. Your orders, Sir?"

"Change torpedo loadout to Toxin Alpha. Two salvos, all turrets. Rapid fire. Detonation range 500."

"Two salvos, Toxin Alpha aye, Sir. Turrets are loaded and ready. Firing."

Torpedoes erupted from all defence turrets, sending a swarm of silver hornets roaring through the water. They barely had time to clear *The Broch's* outer defence perimeter before detonating simultaneously, throwing up a dense corrosive cloud before the approaching Leviathan and its as-yet unknown allies. The vanguard of the larger force sheered away in frenzied panic, repelled by its first contact with drifting tendrils of concentrated Gasopod toxin billowing out from the detonation zone. *They're too gorram close. If that toxin cloud doesn't hold them back, we're in serious trouble.*

"Do we have a positive I.D on the composition of that main force yet?"

"Negative, Sir. They are using some kind of bio-electric distortion field to mask their approach." Savini said. "Commencing multi-spectrum EM scanning. Acoustic signature and motion analysis is consistent with Crabsquid swarming behaviour, 95.8 per cent confidence. Be advised that there are several anomalous sonar returns inside the swarm itself. Unable to identify, thus far."

"Make ready another two salvos. Set detonation range to 400 metres. Keep a close eye on that toxin concentration. If it falls below 1000 parts per million, they'll rush in and overwhelm the outer defence ring."

"Two salvos, Toxin Alpha loaded. Ready to fire, Sir." Savini replied. "Repulsion turrets E-1 and E-2 are engaging the Leviathan on proximity detection... He's coming in!"

"Sneaky bastard." I growled. "He's swung around to the very end of the defence arc. He knows that our repulsion cannons can't do much damage to him, so he's going to chance making a rush at us. He could do some serious mischief when he gets among those torpedo turrets..."

Judging by his sudden change of expression, Enzo has realised what is happening. *Trojan horse.*

"Sir! The Leviathan is a decoy! - Those Crabsquids and whatever it is they're hiding are the main targets... Request permission to activate the TRIDENT defence array."

"Well spotted, Mister Savini. Incidentally, I was wondering when you'd ask about that." I grinned. "Authorisation: Selkirk, A. F. Authentication sequence: Echo, Sierra, Tango, Five, Two, Sigma. Weapon is enabled. You now have full control."

"Amplitude is set at twenty per cent. Frequency, seven Hertz. Range-gate set, two hundred metres. Weapon stands ready in all respects. Awaiting your firing order, Sir."

I nodded approvingly, then tapped out a command to power down the TRIDENT system and terminate the simulation. There's no truly safe 'practice shot' setting for a weapon system that can pulverise solid basalt. Feeling particularly splendid at this point, I tilted the command chair way back into a more pleasant and totally non-regulation seating angle. "So, JUNO... How did we do?"

"Exceedingly well, Captain. Mister Savini appears to have a natural aptitude for tactical analysis and weapons control. His performance during the simulation was highly commendable, as was his adherence to established procedures and a formal command structure. I believe that we may have found our Weapons Officer, Sir."

"I agree. Now DIGBY will have someone to boss around." I laughed. "Seriously though, I conjure you'd make a cracking Gunner, Enzo. *Borealis* will need a fair-sized crew, and if you're game to take the shilling, you'll be the first to make your mark. What do you say, Mister Savini?"

Enzo gaped in disbelief. "*Wha?* - I thought we were... under attack?"

"Afraid not. It was only a simulation." I said. "Well, rather more of an Excalibur Test, actually."

"I have absolutely no idea what an Excalibur Test is, Captain." Enzo admitted.

"It was JUNO's idea. You were hanging around in the corridor outside the Bridge looking all kinds of wistful, and she just up and reeled you in. Reckon you made it pretty obvious you wanted to do something other than sit on your bum all night drinking Creepvine beer... Am I right?"

"Yes, Sir. I'm used to running sensor ops and communications for the colony. Now that I have a much better idea of what I'm supposed to be doing at those consoles, I actually enjoy my job. Just wanted to make myself useful here, if that's okay with you."

I stroked my chin thoughtfully, sizing the chap up. A steady hand and a clear head under pressure, eminently capable of looking beyond what shows up on his scopes. Shows plenty of initiative, yet he manages it without coming off as a fawning butt-creeper. Definitely my first choice as ship's Gunner.

"Enzo, think of that combat simulation as an aptitude test. One that you passed with flying colours, I might add. In a few week's time, we'll begin recruiting and training your fellow colonists in earnest. There's a million and one jobs that keep a starship flying, and we're going to need every willing hand that can be mustered from your group. There's also the social angle to consider. Sure, me and the crew could automate the hell out of *Borealis*, leaving you and the others to twiddle your thumbs for the next 50 or so years. Given the reality of our situation, I'm pretty certain that most folks would prefer to be doing something meaningful during their time out of cryo-sleep. Wouldn't you agree?"

"Absolutely, Captain. In fact, I'd like to start my training as soon as possible, if that's okay?"

"First-rate, Ensign Savini! Please report to Commander DIGBY, 0900 tomorrow. He'll bring you up to speed on the precise nature of your role, as well as the new weapon systems you'll be controlling. One more thing. You might want to grab as much free time as you're able. The next couple of months are going to be an absolute beast. Not just for you, either. There's no royal road to mastery of any specialist's field, and Enzo old mate... You've picked a real beauty, at least as far as sheer hard work is concerned. Welcome to the ship's company. Okay, that's all for now, Enzo. You're officially dismissed. Hit the mess deck and kick back with a few beers. You've earned it."

Savini eagerly returned my salute, turned and darted off. "Thank you, Captain. See you tomorrow!"

"Well, it looks like you've made his day, Sir." JUNO observed dryly.

"Rightly so. The kid's damn good at his game, even without proper training. I can't believe it's the same poor sod I tore a strip off barely a month ago. He's come along a fair ways since then."

A moment later, Héloïse strolled onto the Bridge. Her bemused smile suggested that she may have narrowly avoided a collision with our newest crew member. Apparently, the colonists have requested a proper old-fashioned 'film night' tonight. My response: No problem at all. Fifty kilos of flavoured popcorn (sweet or savoury), choc-top ice cream cones and hotdogs, coming right up!

There are certain occasions... Mercifully rare, I might add, where I fervently hope the ground would open up and swallow me without a trace. This was one of them.

Our film night got off to a cracking start. Kicked off with some animated stuff to appease the kids. *Road Runner*, *Minions*, *Pokémon*, *The Monkey King* and so forth. Relatively light and fluffy all round. Rather surprisingly, most of the adults also seemed to enjoy it. However, when it was time to screen tonight's double feature, I noted with considerable alarm that none of the youngsters had been bundled off to bed. Naturally, I strongly advised the audience that *Aliens* might not be suitable for very young children, although their strident howls of protest seemed to indicate otherwise.

The People have spoken. What more can I do?

It's probably worth mentioning that the colonists actually voted to watch *Aliens* in the first place. Rather ironic, given the nature of recent events. Their second choice of film was thus far undecided, as reflected in PDA votes trickling in as the evening progressed. Still, with a selection of over 50,000 films and serials to choose from, the colonists were definitely spoiled for choice. During Intermission, a snap decision spread like wildfire among the colonists. Resoundingly unanimous.

Our last mission in the Lava Castle.

"Captain, I certainly understand your reluctance," JUNO said. "However, the colonists are quite adamant in their request. Nothing in our mission recordings constitutes a further cause for concern, as the Kharaa threat has been fully neutralised. With all respect Sir, I feel that full disclosure of that encounter is in everyone's best interests. Of course, your decision to veto is final."

"That's barely one step short of blackmail, lass." I growled. "Even though I'm not entirely comfortable with this idea, I have no choice but to agree." I breathed a sigh of resignation. "Okay, we might as well make a decent show of it. Is anyone willing to beat our raw footage into shape?"

IANTO stepped forward confidently. "Sir, I am able to convert our video feeds into a suitable documentary format, broadly based on the atmosphere and audience reactions evoked by the previous film. With appropriate editing and pacing, I am certain that it will entertain the colonists in a similar fashion. However, I do require some guidance regarding the intensity of violence you wish me to depict. How shall I proceed, Sir?"

I mulled over his question briefly, then replied. "Use your best judgement, lad. I take it you saw their reactions during the scariest parts of the film? Well, in this case... Dial it up a wee bit more. Give them the full *cinema verite* treatment. Oh, one more thing. No stirring soundtrack. Got that?"

IANTO grinned. "Understood, Sir. I estimate that it should be ready for screening in ten minutes." It's probably best for me to sit this one out. Events are still far too fresh in my memory to simply kick back with a jumbo-size tub of popcorn and snuggle up to Héloïse. The worst part of it is, I'll never be able to forget what happened in the Lava Castle. To the colonists, it's just another one of *Captain Selkirk's Ripping Yarns*. Not here, though. It's another painful reminder that I used to be human.

Unsurprisingly, I found myself wandering aimlessly through the corridors of *The Broch*. It's hard to pin down what emotions I'm supposed to be feeling at the moment. There's a definite streak of self-consciousness somewhere in there; that much is apparent. However, there's also a sense that I'm angry about something, but it's all so vague and unfocused that I can't attribute it to anything that's happened recently. In fact, everything seems to be tickety-boo around here. The colonists haven't caused any major problems, the crew is handling all the minor dramas around here splendidly, and things couldn't be better between me and Héloïse. To be honest, I haven't a gorram clue why I'm feeling like I'm on the verge of an emotional melt-down.

Sooner or later, I'll have to let JUNO know. Talking it out with Héloïse might offer some measure of comfort, although I'm inclined to suspect that there might be a problem with my core program. I've always been afraid of losing that inner spark that defines me as a human, so this is kind of a big deal for me. In the meantime, I'll just have to soldier on and hope for the best.

On the pretext of doing something useful, I dived into the base monitoring systems to see how our old stone frigate is doing. All systems are nominal. Power and life support are ticking along like Swiss clockwork. Defence grid is set at Condition Green. Nope. Absolutely nothing to see here.

Hmm. Security. Almost everyone is still where I left them. A few colonists pottering about the berthing spaces, most likely putting their bairns down for the night. If they stayed long enough to catch our first encounter with the Kharaa, good luck getting those poor little mites to sleep...

Hang on. Two rogue motion traces. Heading for the sub bays, by the look of them. PDAs are assigned to a pair of almost-teens named Roche Dupré and Miiko Vaina. I'm guessing they've been inspired by our thrilling on-screen exploits, and feel like a taste of adventure first-hand. Sorry, kids. Not on *my* watch. It was a simple matter to activate a hologram of myself leaning casually against the sub bay's inner airlock door. As they rounded the corner, it was a rare treat to see their expressions go from shift to shocked without benefit of a clutch. Cue lame excuses in 3...2...1...

"Good evening, gentlemen. You appear to be lost... May I be of assistance?" I said pleasantly.

"W-we were looking for the... um, toilets?" Miiko stammered.

I shook my head reprovingly. "They're not here, mates. You're in a restricted area, and you were told the rules plainly enough. Now, go back the way you came. This is your first and only warning."

Roche stepped forward a pace and squared his jaw belligerently. *Uh-oh. Here comes the smart lip.*

"So what? We were just looking at stuff, you know. No harm in that, is there?" Roche smirked. "Besides, you're only a hologram of the Captain anyway. It's not like you can stop us."

I grinned back at the kids, hitching my thumb at the airlock door behind me. As the inner door slid open, *Gawain's* floodlights flared like a welding arc, instantly dazzling the young tearaways.

"Actually, I can." *Gawain* leaned forward, menace incarnate. *"This is the part where ye run away."*

I chuckled a fair bit as the pair pelted back down the corridor. Aye, it was a fairly mean stunt to pull, but we'll consider this a lesson well learned. In truth, those kids didn't stand a chance of gaining entry to the sub pens, even if they tried sprinting an access code using their PDAs. JUNO's core AI has total control over *The Broch* and *Kaori-san no-shima*, and no amount of button-mashing would get them past any of the restricted access doors in either station. To be completely honest, those MAX-SEC door keypads aren't connected to anything but the base security system. They're essentially just clever props designed to keep any potential intruders busy for a while.

I paged DIGBY on internal commlink. "In roughly fifteen seconds, a pair of kids will be passing through Ops Plaza at a respectable clip. Please intercept and escort them back to their elders."

"Aye, Sir. Do you require any further action to be taken?"

"Negative. I conjure they've got the message. By the by, mate... How are things going in there?"

"Remarkably well, Sir. Transmitting video feed now. Time compression factor, one thousand."

I was transported back to the Lava Castle, first-person perspective. Astonishingly, IANTO has done far more than merely stitch together our raw mission footage into a rough sort of documentary. He's turned our video-feeds into a stunning two and a half-hour feature film, comparable with any of the finest 'bug hunts' spawned during the Golden Age of Hollywood. Even though I experienced this encounter first-hand, I saw those same events unfold through the eyes of my companions. It was an eerie sensation, almost hyper-real in its intensity.

By virtue of his Life Sciences core programming, IANTO knows precisely which human sensory inputs to manipulate in order to elicit a particular emotional response, and he has made excellent (if somewhat disturbing) use of that knowledge. The faintest sound, every fleeting shadow seemed to foreshadow something terrible; an artful series of subliminal cues finely calculated to increase tension in the audience with each passing moment. No false starts, no cheap jump-scares. When the Kharaa are finally revealed, every encounter becomes a visceral and desperate fight for survival. And you're in the thick of it.

On a sudden impulse, I fast-forwarded to the Onos ambush. My swan song, as it were. I felt myself knotting up inside as the event played through once more, acutely aware that everyone watching this film would see me 'die' here, at least in that particular incarnation. And yes, it was an extremely unpleasant experience as I revisited this moment. I might even go as far as saying it was traumatic. Looking back on it, I have to admit mine was an utterly ignoble death. Being trampled and gored by a rampaging Onos is not a good way to go. There's absolutely nothing heroic about it. You might as well stand in the middle of a maglev track, it's basically the same end result.

As my mind wandered among these morose thoughts, I noticed that the audience had fallen strangely silent. Up to this point, they had been cheering and hollering with wild abandon as we chewed through successive waves of Kharaa, guns a-blazing. We were the Good Guys. We were winning. We were indomitable. Until now.

+++ ARGUS ALERT: PRIORITY ONE > WARP SIGNATURE DETECTED > VESSEL ENTERING SYSTEM +++
+++ INCOMING MESSAGE +++

"This is Terran Confederation Ship *Carl Sagan*. Captain Jens Halvorsen, commanding officer. Responding to Alterra Corp automated beacon transmission. Is anyone receiving me?"

"We read you, Captain Halvorsen. Alexander Selkirk, acting Captain of TCS *Aurora*. It is imperative that you hold your position once deceleration manoeuvres have been completed. I say again, hold your position. Do not approach any closer than 10 AU of *Alpha Hydrae IV* until advised that it is safe to proceed. Sending data-burst packet with full details of the situation down here. Please stand by."

"Message received and understood, Captain Selkirk. I'll contact you in one hour. Halvorsen, out."

By the time I reached the Bridge, JUNO, IANTO and DIGBY were already at their stations. I felt it best to keep this development under wraps for the time being, at least until we've determined the exact nature of the *Carl Sagan*'s mission. There would be no point in telling the colonists that a rescue ship has arrived, only to find out that its primary mission prevented their return to Terran space for months or even years. Since the *Sagan* is most likely a commercial vessel, the Captain's mandate in a rescue situation only extends to rescuing personnel in actual distress and ensuring their safe return to the nearest space-port. Unfortunately, there is no time frame legally specified for that eventual return. It all boils down to hard-nosed economics. It can cost billions of Credits to commission a starship's voyage, and the mission's financial backers will certainly demand tangible returns for their investment. Sadly, the eternal gratitude of a few dozen castaways doesn't feed the bulldog.

And if the truth be known, our colonists are not in any immediate peril. Far from it, in fact. Halvorsen would be entirely within his rights in refusing to rescue them.

"Okay JUNO, what do we know about the *Sagan* so far?" I inquired, settling into my chair.

"Scanning complete, Sir. Alterra Corp *Hephaestus*-class construction vessel, Mass, 750,000 metric tonnes at 1g. Alcubierre warp propulsion drive, equipped with advanced Dark Matter reactors, Gen III sub-light plasma engines. No atmospheric flight capability. Eight *Percheron*-class cargo transports, six survey shuttles, six zero-g tugs and fifty multi-purpose drones onboard. Crew complement, 1,100. This vessel is configured for deep-space mining, materials processing and manufacture."

"Well, that's a relief. She's a big puppy, but at least she won't be digging any holes in our back yard."

"Unless the *Sagan*'s crew have orders to construct a STARFISH installation planet-side, Sir." IANTO observed bleakly. "However unlikely that may be, it represents a considerable cause for concern."

I frowned. "Too bloody right. If that's indeed the case, we've got to convince them to revise their plans. If needs be, we might be able to spare them some material from the *Borealis* construction stockpiles, rather than have some muckin' great juggernaut ripping the seafloor out from under us. I will'na stand for that, and *Father of Tides* would'na be well pleased, either. When Halvorsen gets on the blower again, I'll be taking pains to touch upon this very subject... Mark my words."

Precisely one hour later, Halvorsen's image appeared on the main Bridge monitor. According to readings obtained from our ARGUS satellite array, the *Carl Sagan* has been 'parked' outside the asteroid field surrounding one of the system's gas giants, *Alpha Hydrae V*. It appears that Halvorsen has taken my warning quite seriously. I believe that we may be able to have a civilized chat after all.

"Good morning, Captain Halvorsen. Welcome to the *Alpha Hydrae* system."

"Thank you, Captain Selkirk." Halvorsen replied warmly. "Frankly, I'm astonished to find anyone alive down there at all, let alone a thriving Terran colony. Given your initially bleak situation, you've achieved something truly remarkable here. An extremely impressive effort, Sir."

So far, Halvorsen seems like a pretty decent chap. Early fifties, lean of frame and an honest face as weathered as the timbers of a Viking longship. He's got the Long Stare; probably travelled more than a few parsecs in his time. I conjure he might be on first-name terms with every member of his crew. Yes. I'm definitely getting a good read from him.

"Thank you, Captain Halvorsen... So, might one enquire what brings you to this delightful corner of the *Ariadne Arm*? The scenery is lovely, though some of our neighbours are a wee bit worrisome."

He caught my meaning immediately. "Ah yes, the Kharaa. Actually, they're the main reason we're here. We've been contracted to build a phase gate in this system. The TSF Brass have plans to push deep into Kharaa territory and take the fight into their core systems." He lowered his voice, speaking man to man. "Personally, I'm not convinced that's an entirely sane notion, but what else can a man do? If it were up to me, I'd send in a fleet of *Dreadnaughts* and glass those bastards. If some fools want to put beardless boots on the ground, it's not my place to argue. I only build the bloody gates."

I nodded soberly. "Aye. We go where we're told, and that's the end of it. Still, I take it you saw how we dealt with our wee plague? I'm thinking those TSF lads could use something along those lines. A synthetic enzyme, based on a natural substance that we discovered down here. Absolutely lethal to Kharaa DNA, and a perfect doddle to brew once you have the art. Reckon they'd be interested?"

Halvorsen grinned broadly. "Hell yes! You could practically name your own price, man!"

"Nay, I wouldn't be asking one. If it wipes out Kharaa to the very last, it's payment enough for me. Now, my burning question is... Where exactly are your gate construction materials coming from?"

Without a beat of hesitation, Halvorsen replied. "The asteroid belt, mainly. It all depends on the relative abundance of the various elements needed for this project." He consulted a nearby read-out. "Survey analysis looks promising for most of the raw materials, although usable radioactives are a bit on the scarce side out here. We might have to look planet-side for those."

I waved dismissively.

"We're able to gather those for you. No problem. Now, this brings me to my next question. Can you spare an atmospheric shuttle? We need to get a supply of vaccine up to you, and my home-brew rockets are too slow. Bear in mind, it will have to be sent down unmanned to get past that Precursor energy weapon. As far as I know, a quarantine's still in effect down here."

Héloise chose that precise moment to enter the Bridge. Judging by her expression of annoyance, we're all about to cop a serve for bailing out on movie night. Before she could speak her mind, her eyes went saucer-wide at the sight of Captain Halvorsen's face on the monitor.

Whoops. The cat's out of the bag now. Her eyes narrowed suspiciously as she slid up alongside me.

"Who's this?" she stage-whispered, slyly jabbing an elbow into my ribs.

"Héloise, meet Captain Jens Halvorsen, of the Alterra ship *Carl Sagan*. They entered the system just over an hour ago. I sincerely apologise for not letting everyone know the minute it happened, but we had to make absolutely certain that there was no cause for alarm. You know how it is."

Halvorsen's left eyebrow lifted noticeably at my last comment. "You were expecting some trouble?"

I grinned. "Always. Never had a new face pass through here without raising some kind of a rummy. It makes a refreshing change to finally meet someone friendly. Anyways, I'm forgetting myself... Captain, Héloise Maida; my boon companion and one of my dearest friends. Naturally, I'm well pleased to include my android crewmates among that number. Meet JUNO, IANTO and DIGBY."

Halvorsen nodded pleasantly as each was introduced in turn. "So, Captain Selkirk... How should we best proceed from this point? The *Carl Sagan* doesn't need to approach any closer to *Alpha Hydrae IV*, although we will need to send freighters down to the planet at some stage. Mainly for replenishment of our protein stocks and seawater for processing into deuterium. I'm also thinking that my crew will want shore leave, particularly when word gets around your planet is hospitable."

"Most definitely. Although the colony of *Kaori-san no-shima* is capable of supporting a reasonable number of additional personnel, I feel that a purpose-built facility would be more suitable for your crew's needs. Now, I'm not saying that there would be any serious friction between your crew and our colonists, but it might be best to avoid having to deal with that possibility, wouldn't you say?"

Halvorsen nodded sagely. "Absolutely. They're a disciplined shower of louts, but you never know what to expect once the sun dips below the jib." He chuckled, "Still, I'll read all of them the Riot Act before unleashing those jokers planet-side. They shouldn't give you the slightest lick of trouble."

A sly smile dawned on my face. "I've just had a wee idea, Captain Halvorsen... I'm broad-waving you one of our latest escapades. Just tell your chaps that if they've any notions to misbehave, they'll most certainly run afoul of our friendly Shore Patrol. I conjure they'll get the message, five by five."

Halvorsen and I spent another hour or so hammering out the finer details, but this looks like the chance we've been waiting for. With a working phase gate in the system, *Borealis* won't be facing a 50-year slog once it finally breaks atmo. Only three weeks of subjective transit time is needed to reach the next gate at *Omicron Leonis*, then it's an equally quick hop through each of the gates at *Gamma Crucis*, *Alpha Geminorum*, *Procyon* and the fabled *Tannhäuser Gate* at *Sirius*. Next stop, *Sol*.

It briefly occurred to me that I could have asked Captain Halvorsen about hitching a free ride back to *Terra*, then I thought better of it. I'm considering a far larger picture. Halvorsen told me that it will take nine months to build and align the phase gate. If nothing else goes awry (Powers forbend that!),

we stand a good chance of having *Borealis* completed and ready for launch in six month's time. Aye, we're going to climb back up that long ladder under our own steam. That's the stuff of legends. 0645 hours. That time of day when a body weighs up its desire to sneak an extra fifteen minutes of rack time, or succumb to the siren song of breakfast.

Right now, I could murder a mug of tea and a proper fry-up. While it's true that I don't actually *need* to eat, the fact remains that I still desire to do so. The crew are of a similar mindset on this subject. Mealtimes are a valid recreational activity to us. Apart from the basic chemical energy that we receive, the notion of conviviality at the mess table has become an essential aspect of our daily routine. In fact, we tend to get things done more efficiently by discussing the nuts and bolts of a task over a brew beforehand. A slap-up evening meal and a spot of carousing is our way of celebrating a passable day's work. Believe me, it goes far deeper than shovelling perfectly good human food into four subminiature bio-reactors. We genuinely appreciate this experience in a way that most humans probably wouldn't understand.

First order of today's business is to brief the colonists on the *Carl Sagan*'s arrival. The mess deck was already in full swing as we entered, alive with the clatter of serving trays and its usual hum of conversation. Suddenly, someone noticed us coming through the doorway. The chatter stopped abruptly as if a switch had been thrown. As one, the colonists rose from their seats and bowed solemnly in our direction as we walked towards the auto-galleys.

"Héloise, Dear Heart..." I muttered apprehensively, "What's all this bowing business about?"

"Ah, I forgot," she giggled, playfully tweaking my beard. "You weren't here when our movie was playing last night." Héloise said airily, "Everyone saw how bravely we fought the Kharaa. *Beaucoup* tears were shed when my handsome Captain fell in battle, *tres grande tristesse*... So many, many tears. Now you are back among the living, and we are all mighty heroes. We were *magnifique*!"

"Oh, ye gods..." I groaned. "All this situation needs now is a Hans Zimmer soundtrack and us doing the obligatory slow-motion walk. Bloody hell, I only wanted to grab a bite to eat."

"You might as well become accustomed to it, Sir." JUNO observed dryly, "We have."

I gritted my teeth in a vague approximation of a modest smile, nodding and exchanging a few mumbled pleasantries with the colonists as we passed by.

Even DIGBY was intent on making a meal out of my discomfort, although his deadpan suggestion of having Ensign Savini scattering rose petals before our feet cracked me up quite nicely. Might as well roll with it for now, because I'll be dropping something even bigger than our cinematic Kharaa frag-fest on those colonists by the time everyone's starting their second cuppa.

When I judged the time was right to speak, I called the colonists to attention.

"Ladies and gentlemen, please remain seated. Last night, a Terran starship entered our system. The TCS *Carl Sagan* has been sent here to construct a phase gate; one that will allow us to return to Terra in a vastly shorter time-frame than we first envisaged. However, the arrival of the *Carl Sagan* does

not mean that rescue is imminent. The phase gate will take nine months to construct and calibrate to reach operational status, and *Borealis* will be ready for launch in approximately six months. Our return flight will take a little over one Solar year, at most. You have my word on this. Thank you."

As Benjamin Franklin once said; "Fish and visitors stink after three days."

Even though our guests maintained impeccable standards of personal hygiene and behaviour during their brief stay, I found myself extremely relieved when we finally bundled the colonists into *Exodus* and deposited them safely back at *Kaori-san no-shima*. Fortunately, that worrisome 'demigod' business died down rather abruptly, ably assisted by some particularly salty comments from Héloïse. We're just your average off-the-shelf AI androids, albeit particularly clever androids blessed with unfettered access to a shipload of nasty weapon systems. No big deal.

Speaking of weapon systems, we'll have to deal with that Precursor ship-killer without any further ado. *Carl Sagan's* mining crews are already extracting resources from the asteroid belt, and Halvorsen has informed that he will have to start sending his resupply freighters planet-side fairly soon. His current estimate is two weeks before his onboard deuterium stocks are exhausted, although I'm reasonably certain that we can sort things out with *Sky Watcher* in a day or so. Here's hoping. For starters, we need to convince *Sky Watcher* that all our colonists are completely free from infection. IANTO drew blood samples from everyone prior to leaving *The Broch*, and I'm working on an assumption that the Precursor AI is able to analyse those samples somehow.

As backup, I've also brought Héloïse and Enzo Savini along. Living proof that the Kharaa are finished.

Ulysses swung wide of the massive gun emplacement, lining up to enter the facility's moon pool. It's a fair bet that the Precursors once possessed vehicles of similar dimensions to our *Cyclops*, as I have detected an enormous berthing space inside. That's good, because *Taranis* is sailing astern of us. The way I figure it, a friendly chat with *Sky Watcher* should be more than enough to get the job done. If by some remarkable chance it isn't, six Mk. V ExoSuits and a pair of *Ripleys* will make an extremely compelling argument for our case. I'm rather hoping it won't come to that.

"Nervous, laddie?" I said, clapping a friendly hand on Savini's shoulder. "Don't be. First-mission nerves are entirely normal, so I don't think any less of you for that. Just keep your eyes open and your finger off the trigger. If a situation does develop; think first, and then act. We've got your six."

"T-thank you, Sir." Savini stammered, forcing a lukewarm grin. "I'll try not to get myself killed."

"Stout fellow! That's the spirit!" I laughed. "Nay, it won't come to that, mate. Anything that wants you or Héloïse will have to chew its way through us Toasters first, and that will take some doing. Okay, brace up, laddie. We're docked."

"JUNO, deploy ExoSuits on remote command and secure the area. No surprises, if you please."

"Aye, Sir. Exosuits have been launched." JUNO said calmly. "No lifesigns detected in the immediate area. Commencing tactical sweep of moon pool. No threats detected. Main corridor entrance is force-shielded, Sir. I have discovered something that may be a control mechanism for the force field, but no apparent interface device is present. Your orders, Sir?"

"It's time to put some boots on the ground. Okay troops, mount up and move out."

Since Enzo has never piloted an ExoSuit before, the quickest way of teaching him was slaving *Centurion's* controls to *Gawain* and letting him get the feel of its systems on the fly. I engaged the haptic force-feedback on his controls and walked him around for a spell, demonstrating the hand motions he'll be using. He seemed to be getting it, although I had to coach him along some.

"Don't fight the control yokes, laddie. Keep your grip loose for now. Feel how they're moving, and see what your suit is doing in response to those movements. It's all pretty intuitive, once you've got the hang of it. Right, now try it for yourself." I disengaged the remote briefly, allowing him to move around freely for a couple of minutes. "That's looking good, mate. Right, we're going for a quick swing to the other side of this moon pool. No need to panic. I've resumed control of your suit again. Héloise, you'll be coming with us. JUNO, IANTO and DIGBY, stand fast. Okay, are you both ready?"

Enzo stole a quick glance at the sub bay's ceiling and gulped in alarm. It's a fair distance up, and an equally daunting distance across the pool. I conjure he was clever enough to guess how this manoeuvre would work, and he had every right to be a wee bit apprehensive about it. It's not so bad when you're underwater; everything slows down to a nice, leisurely pace. Doing a Tarzan land-side is a different matter entirely.

Under my control, *Gawain*, *Morrigan* and *Centurion* turned briskly to face the opposite side of the moon pool. All three ExoSuits lifted their right arms skyward, as if grimly saluting an unseen Caesar.

I grinned wickedly and bellowed, "*Ave! Qui nos morituri te salutant!*"

Three grapples launched as one, caught and locked onto the ceiling. As their trailing cables retracted, the suits shot into the air like bottle rockets, describing three perfect arcs as we swung across the moon pool. Halfway through the swing, their left arms rose into position and launched a second grapple. As soon as the left grapples made solid contact, the right lines disengaged and retracted. At the extreme end of their arcs, the suits fired their right grapples again, latched and cancelled out the momentum of the return swing. We came to rest ten metres in the air, swinging gently. Like spiders descending on silken threads, the ExoSuits gently touched down on the deck.

"Any questions?" No? - Okay. Now, back to the other side. We're using the jump-jets this time."

I marched the ExoSuits to the edge of the moon pool, continuing my lecture on the move.

"You have a maximum of six minutes flight time on continuous thrust, then you'll need to wait another two minutes to allow the suit's propellant supply to regenerate. Don't squander it. Never climb too high, watch your thrust readouts and work to the rule of thirds. Always leave a bit in reserve. It's not so much of an issue underwater... Unless you're about to land in a lava vent, but you can count on your grapples to haul your bahookie out of the fire. Land-side's a different story. Nine point eight two metres per second, per second, straight down. No parachute."

The ExoSuits rose slowly at 25 per cent thrust, turbines whining softly. I'm taking it nice and slow this time, so that Héloïse and Enzo can clearly see how it's done. Five metres up, thrust vectored for forward flight. Velocity, five metres per second. All systems are nominal. Landing in fifteen seconds... And we're down. Piece of cake.

"Well, I'd have to say that was five minutes most profitably spent. Enzo, you are now a qualified ExoSuit pilot. Congratulations." I said drily. "Oh aye, your training may have been a bit on the terse side, but you now know as much as I did after my first solo run. You'll pick it up in no time."

The Precursor cannon's moon pool has three exits, two of which are blocked by force fields. After a fruitless search of the area and a thorough examination of both field control pedestals, it was obvious that we needed something that simply wasn't to be found in here. However, we did discover that those pedestals emitted a faint energy signature, and my best guess was that anything used as keys in here might have similar properties. On a hunch, I set the suit's external scanners to search for anything in the immediate area with the same energy pattern. A series of faint signal pings began to appear on the HUD, and my heart sank. According to the map overlay, most of those pings are located inside this facility. However, there are at least two somewhere on the island itself.

"I don't mind telling ye, this looks to be a wee bit dicey. We're deep inside Reaper territory, and we need to climb back onto the island proper. This means going outside without a *Cyclops* to protect us. These ExoSuits will take a fair beating, but don't be set at ease by that. A Reaper Leviathan is capable of doing heavy damage to our vehicles, and they've become sneaky buggers, too. In the early days, you could hear them roaring away in the deeps, long before they took an interest in you. Gave you plenty of warning, y'see. Not now, though. They've adapted their hunting techniques in response to a human presence. By the time they give it the old school roar, you're as good as dead."

Strength in numbers, it is then. I would have preferred Héloïse and Enzo to remain in the sub bay, but neither one of them would hear of it. My main concern is focused on the small fry that swarm around this island. Biters and Bonesharks are usually only minor nuisances to anyone in an ExoSuit, although these two species are prone to raising a ruckus, particularly when they think it's feeding time. That's certain to pique the curiosity of larger predators, and Binky is the undisputed power in these waters. There's also a distinct possibility that Moe, Larry and Curly might take an interest.

I believe that the phrase 'horribly exposed' eloquently describes our current situation. We're attempting to sneak across the base of a near vertical wall of bare basalt, with a twenty-strong pack of Bonesharks hawking about our heads every step of the way. Every once in a while, one gets brave enough to swoop in and try his luck. The temptation to bring our heavy weapons into play is strong, although it would be a fatal mistake on our part. The last thing we need now is a feeding frenzy, and it would only take one dead or injured Boneshark to trigger it. There's no love lost between individuals of that species, and they wouldn't hesitate to turn on one of their own.

Finally, we reached a point where we could exit the water with relative ease. Only sixty metres of sheer rock face stand between us and dry land. Too far to use jump jets, and definitely too far for all of us to grapple up in one go. Those Bonesharks will be all over us in a flash, the same second we turn our backs to them. An undefended climb would be outright suicide. Only one way to do this.

"Ascend by pairs, highest pairs on overwatch. Belay off and stand ready every twenty metres."

JUNO and DIGBY went first, shooting twenty metres straight up. IANTO and Héloise quickly followed. As soon as they were in position, JUNO and DIGBY anchored their suits and stood guard. This was the worst part of it. All six of us strung out over an undersea cliff, facing a pack of Bonesharks that grew increasingly more agitated with each passing second. It won't be too long before Binky decides to investigate what all this commotion's about.

"Okay Enzo, it's our turn now. Set your grapples to strike three metres to the right of Héloise's suit. Let me know when you're ready to launch, and I'll follow your lead. Pick your mark and fire, lad."

Enzo's ExoSuit tilted back slightly as he aimed. Both grapples fired simultaneously. His right claw struck and held, although the left claw hit a mineral nodule instead of solid rock. The nodule shattered instantly, leaving the grapple to fall impotently towards the seabed.

"Retrieve your left grapple, smartly now!" I snapped.

Enzo obeyed immediately, reeling in the slack cable that had been piling up at his feet. Fortunately, he did not make the mistake of moving around as the cable fell around him, so there was little chance of the line fouling on his suit. Although he could haul himself up on one grapple, Enzo would find it nigh impossible to use his suit's legs to assist him in making that climb. Best to have both grapples solidly engaged before setting off, or his ExoSuit would end up bouncing all over the place.

"No harm done, mate. Take your time and try again." I said calmly. My rear-view camera told a different story. Three Bonesharks had broken off from the pack, and they were heading straight for us. I turned to face them, repulsion cannons dialled up to maximum. Time to bloody some snouts. After a quick check to see that Enzo was lined up to launch his left grapple, I strode forward and activated the piton-bolts in *Gawain's* foot pads, anchoring my ExoSuit defiantly onto solid basalt.

"Second grapple away and locked, Sir!" Enzo yelled.

"Up ye go! Haul away now, quick as ye like!" *Centurion* shot up at full speed to join the others. I now had the undivided attention of three Bonesharks, hovering directly in front of me at a prudent distance. Too far away to make a telling shot with my repulsion cannons, but just close enough to let me know that they meant business.

"JUNO, Get Héloise and Enzo out of the water! I'll be coming up hot, so stand ready for a dust-off!"

"Understood, Sir. What is your intended course of action?"

"A diversion. These three scunners are about to become the best of chums. Stand by."

The Bonesharks shrieked, wheeled about and charged straight for me. At ten metres, I opened fire with both repulsion cannons, blasting the creatures apart with rapid-pulse graviton beams. *Gawain* shuddered violently under their staggering recoil, but the pitons held firm. Had I done this without activating those anchor bolts, *Gawain* would have slammed into the cliff face instantly.

I had only a few seconds before the rest of the pack caught scent of blood in the water. It's about to become an extremely unhealthy location for pretty much every living thing in the immediate area. I jettisoned *Gawain's* pitons and sprinted back toward the cliff, activating the ExoSuit's jump-jets as

soon as I was within grapple range. One glance at the maelstrom of carnage now boiling below me was sufficient to fuel a year's worth of nightmares. A monstrous shape was rising from the depths.

In case you're wondering... Yes, I still have nightmares. Reapers figure prominently in most of them. Binky tore into the tightly-packed mass of Sandsharks like a torpedo, jaws agape. This initial assault caught them completely unawares; the pack scattered in all directions, but not before several of them fell to the Leviathan's scything mandibles and jaws. Inside that soundless explosion of blood, a slow rain of severed heads and tails began to fall; tattered remnants cast aside in his greedy haste.

A thoroughly risky move on my part, I'll admit. Still, I was the only one in any position to see the Leviathan rising. In any case, the Sandshark pack's frenzy had nearly reached critical mass. Call it a snap decision. I've bought us a bare handful of seconds at the very most, and hopefully thinned out any opposition waiting for us on the return leg of this expedition. With any luck, Binky might lose interest in us with a full belly, although I very much doubt it.

The crew were ascending rapidly now. JUNO and DIGBY were waiting for me at the 20-metre mark, Gauss cannons at the ready. Ten per cent thrust remaining. Grapples away. Make every metre count. Thrust again, launch the grapples and haul away. The rear camera's view offers no comfort. An expanding cloud of green haze blooms in the ravening deep, witnessed with crystalline certainty that Death incarnate lurks at its heart. Keep climbing, and never look back.

All present and fully accounted for. Pyramid Rock had put on its Sunday best for our arrival. The sun shone brightly, Skyrays wheeled overhead and lush alien foliage of every hue beckoned invitingly. Aside from a constant skittering noise of Cave Crawlers lurking in the underbrush, the island seemed to be doing its level best to convince us that all was well with the world. Aye, if it wasn't for the hulking shape of an immense Precursor cannon looming over the place like a gargoyle, this would indeed be a capital spot for a beach picnic.

Now that we are outside the Precursor structure again, our sensors are able to obtain a clear fix on those faint energy signatures. The first trace is only fifty metres outside the facility's surface entrance, although the second one is somewhere deep inside Pyramid Rock itself. We paired off and began searching.

Héloise made our first significant discovery in thoroughly traditional manner. Accidentally. *Morrigan's* left foot unit snagged against something as it thudded down, causing the ExoSuit to stumble slightly. The object lay half-buried in the sand, looking for all the world like a grey-green concrete paving slab. A quick glance at a nearby Precursor path-marker immediately confirmed my suspicions. Same material, same cryptic surface ornamentation. After digging it out, we found that the object had broken into two pieces, either by the impact of *Morrigan's* foot or something else that happened a very long time ago. There's absolutely no way of telling for certain. Besides, it's all moot at this point. This object is completely inert. Not a single joule of energy remains. If this is the same species of dingus that we're searching for, it's of no bloody use to us now.

I must say, this artefact is a fair old size. It's either Godzilla's old SIM card, or the remnants of a Precursor force-field access key. I can't imagine anyone having more than one of these at hand.

Eventually, we found one that was fully intact. However, since we have no way of knowing how many of these keys we'll need once we're inside, there's no point in using it on the topside door. We can access the moon pool by going back the way we came. Not exactly the most delightful prospect to anticipate, particularly when there's a ferociously jacked-up Reaper on the prowl down there.

"Well now, that is damn peculiar." I thought. "Folks, I don't recall seeing this entrance here before. It's as if the whole island's tunnel network has been reconfigured somehow. I conjure it has something to do with having that muckin' great gun suddenly materialise. Ground-penetrating radar doesn't show that much detail beyond a few metres, but I'm guessing there's a whole lot more tunnel down there. Might as well find out the extent of it before we all rush blindly down the rabbit hole. IANTO, there should be a crate of seismic survey charges in our old storage cache. Grab six and plant them in the following locations... Transmitting charge co-ordinates to you now."

"Are we going to blow something up?" Héloïse piped up, clapping her hands delightedly.

"Not as such, Dear Heart. There will be a kaboom, but nothing particularly earth-shattering. Probably wouldn't even rattle your Granny's teeth, in point of fact. It's called Terrain Resonance Imaging. Works roughly the same way as sonar, but this method gives you better signal propagation and finer image detail. We can even pick up buried mineral deposits and any structural faults in the rock. It should take most of the guesswork out of exploring this place, and I'm not awful keen on winding up hip-deep in a lava vent. We're in roughly the right area for them, so it pays to tread a mite softly hereabouts... Don't know how you'd manage that in an ExoSuit, but there you go."

Ten minutes later, IANTO checked in. "All charges are in position, Sir. Awaiting further orders."

"Good man. All units, disperse to the individual locations I've marked on your suit HUDs and activate geophone arrays. Report in when you're ready."

I trudged twenty metres to the right of my current position and set up the ExoSuit's sensors to receive incoming seismic data. To save time, I sent remote commands to Enzo and Héloïse's suits, activating the appropriate data acquisition systems. Five minutes later, everyone was good to go.

"All units are confirmed as standing ready in all respects. Firing on one. Three... Two... One."

A prolonged dull *thud* rippled through the ground as all six charges detonated sequentially. A few nanoseconds later, a dense stream of data assembled itself into a highly detailed holographic map of Pyramid Rock's internal structure. *My goodness, how the old place has changed...*

I was right. The maze of tunnels beneath Pyramid Rock has changed dramatically since my last visit. Its structure is perfectly stable, even though the interior is riddled with dozens of tunnels heading off at all points of the compass. There are also a couple of large spaces down there that might hold something of interest, although my most immediate priority is reaching that second Precursor key. We can always check out those rooms later. The main thing is, our path to the second artifact appears to be completely clear and somewhat unusually for this planet; reassuringly safe. We'll see.

Our progress toward the artifact's location was remarkably easy, even though these tunnels have a way of wandering all over the place. Here and there, strange tubular outcrops of the Precursor building material poked haphazardly through the tunnel's walls and ceilings, as if the Precursors had some method of extruding these 'cables' (as thick as a human torso, I might add) through solid rock without having to drill a pathway first. Whatever those cables were intended to power, I reckon it's worth taking a quick peek at it before we head back topside. Let's just say I'm 'mildly intrigued'.

With the second Precursor key safely in hand, I figured we could spend some time exploring the island's tunnel network, if only to satisfy my curiosity about what was on the other end of those power conduits. Strangely enough, there were no smaller cables branching off from the main power transmission lines. On a hunch, I switched my visual feed to scan the entire invisible EM spectrum. Sure enough, those nodes spaced along the super-conducting conduits continuously 'leak' a carefully regulated flow of electrical energy directly into the ether, presumably as an inductive power source powering a variety of low-demand systems.

The illuminated path markers definitely fall under this category, as our scans revealed that those pedestals contain no apparent cables, discrete components or even an internal power supply. Our observations also confirmed an abiding suspicion. The intricate carvings found on Precursor structures and devices aren't ornamental at all. Believe it or not, those aesthetically-pleasing geometric patterns are actually electronic circuits of immense complexity. The good news is, we can duplicate this technology and adapt it to Terran construction methods.

Presently, the tunnel opened out into a large cavern. All eyes were immediately drawn to a large angular structure sitting on a bare outcrop of basalt, located ten metres or so above the main cavern floor. Four rectangular Precursor structural beams, measuring 1.5 metres a side and six metres in length had been formed into a vertically-standing diamond shape. One quarter of its total height had been merged into a low base platform of the same material, forming what appeared to be an arch or doorway.

As I approached the object, a slender pillar rose smoothly out of the base platform. At first, I thought it might be a control device that responded to simple hand pressure. No such luck. The pillar remained extended while I stood near it, and it retracted immediately whenever I moved off the base platform. Other than that, there was no apparent response from the arch itself. Eventually, I became frustrated with the structure's stubborn refusal to yield its secrets.

"Okay, mates. This bloody thing has got me totally stumped. Any ideas?" I huffed in exasperation.

"This place reminds me of a temple, *Chérie*. Did the Precursors even have gods?"

"Not that I'm aware of." I admitted. "There's no evidence suggesting that they believed in supernatural entities at all, leastways anything worth depicting in their architecture. Nearly all of the sentient species encountered so far have some sort of mythic tradition, and there's usually physical depictions of whatever beings they consider divine or heroic. The Precursors have left nothing that indicates any kind of belief structure. Remember, all of these carvings are purely functional. There are no coded references to their ancient past concealed in any of these designs."

After spending a few minutes deep in careful thought, IANTO weighed in with his two Credit's worth.

"Captain, I have detected that this device is definitely consuming power from the facility's main transmission line. This indicates that the device could be in its standby mode. All we need do is flip the right switch, so to speak. I believe that the small pillar has been designed to hold a specific Precursor object, presumably one serving as an activation key for this device. We should begin by searching the surrounding area for anything that might conceivably be used in this manner." Whatever this object is, I reckon we may have found precisely what we are looking for.

DIGBY had found this one lodged in a shallow fissure near the island's largest subterranean pool, an area that had been thoroughly combed at least a dozen times during our search. Again, it was a case of being in precisely the right position at the right time. The object appears to be a manufactured crystal matrix of some kind; comprised of stacked tabular plates in a cubic configuration, roughly 200 mm along each side. It emits an intense green glow, unsettlingly similar to kryptonite, raising immediate safety concerns for our human companions. Scanning revealed that the object is perfectly safe to handle, as it does not emit hazardous ionizing radiation at any frequency band. However, this revelation is completely at odds with the staggering amount of potential energy contained in this crystal.

In short, this object is the answer to an engineer's prayers. Your actual Holy Grail of energy storage. I'm not entirely certain how the Precursors were able to create such a compact energy source, or how many laws of physics were cheerfully swept aside in its making. This small cube has approximately the same energy density as ten of our advanced power-cells, providing twice the energy output of a standard portable fission reactor. If this isn't mind-boggling enough for you, think of this cube as a decaton-range nuclear detonation, safely encapsulated within a block of crystal. That's basically what it is.

I found myself torn between wanting to use this crystal to activate the portal structure, or hanging onto it for use elsewhere. There's no telling how scarce these cubes are, and I'm not inclined to waste them simply to see what happens. For the time being, we should return to the Precursor cannon and finally make some progress on our primary mission.

At least we're now awake to the notion that we won't find these Precursor artifacts stacked neatly where they're needed. It's almost as if they were simply tossed aside during some sort of commotion, and there's a fair chance that some may have been displaced by seismic activity at some point. Fortunately, these objects emit specific energy signatures that can be detected by our sensors, and they also glow rather brightly, making them easy to detect once you know what you're looking for. Of course, the abundance of bioluminescent flora and fauna on *Manannán* complicates visual search methods considerably, unless you filter out everything outside an artifact's unique spectral emission signature. Once you have the knack of it, finding these items is a complete doddle.

We regrouped on the base platform of the Precursor cannon. After a thorough sensor sweep of the weapon, we determined that the gun fires a phased-plasma discharge, channelled through an ionized conduit generated in the atmosphere a few seconds before firing. The corona discharge

seen at the gun's muzzle is visible throughout the entire firing cycle, indicating that the charged conduit has to constantly maintain line-of-sight contact with a vessel until the plasma bolt has reached its target. This means that targets can only be attacked if they are following a pre-calculated descent or ascent profile. Furthermore, its effective range is limited to the upper reaches of the atmosphere. The corona discharge seen at the gun's muzzle is visible throughout the entire firing cycle, indicating that the charged conduit needs to maintain constant line-of-sight contact with a vessel until the plasma bolt reaches its target. This means that ships are most vulnerable to attack while following pre-calculated descent or ascent profiles. Considering the cannon's relatively fast traverse and elevation rates when fully deployed, there are precious few exploitable flaws in this weapon's design. Hopefully, it won't come to that. A friendly natter with *Sky Watcher* should be all that's needed.

"Here's the plan. We'll abseil down to the moon pool entrance and make our way back inside. Rig suits for ultra-quiet running. Cockpit blackout, no external lights showing. I'm launching a recon drone from *Ulysses* first, just to make certain that Binky isn't waiting for his dessert course to arrive. Okay, get yourselves sorted out along this ledge and wait for my signal to drop."

The recon probe drifted slowly out of the moon pool entrance, an insignificant speck of metal peering apprehensively into the darkness below. It hovered at 90 metres, sweeping its sensors through 360 degrees, scanning the whole area from top to bottom. The Bonesharks were gone, but not entirely. Two hundred and fifty metres away, a large shoal of Biters had moved in to feast on their remains, their guttural hyena laughter the only sound piercing an otherwise silent ocean.

I brought the probe in closer. In the gloom below, I spotted something that lay twisted among the boulders on the seafloor. It was Binky. The Reaper Leviathan had prevailed against the Bonesharks, but at a terrible cost. Huge chunks had been torn from his flanks, all four outer mandibles had been sheared away and his powerful flukes were now little more than tattered stumps. A thin haze of blood wept slowly from his gaping wounds, unaided by a mighty heart that had long ceased to beat.

My feelings were honestly conflicted as I gazed at Binky's ravaged corpse. Even though we have successfully avoided a suicidal confrontation with a large pack of Bonesharks and a Reaper, I wouldn't consider this any sort of victory, personal or otherwise. Binky was fully capable of tearing our ExoSuits to pieces all by himself, although we've always managed to part company in some clever fashion in the past. In my own way, I hold an abiding respect for Reapers, albeit a respect significantly bolstered by their sheer size and relentless ferocity. Binky was a magnificent and cunning foe, worthy of a far better end than this. A darksome knight of renown, laid low by a rabble of kerns and gallowglasses. When we return to The Broch, I'll raise a farewell glass to his name.

All thoughts of melancholy must stand aside, at least for now. Our mission is of paramount importance; all other considerations are secondary. After completing a second full sensor sweep, I gave the command to begin our descent. As planned, all six ExoSuits slid noiselessly into the water. Fifty metres down, our grapple lines reached their utmost limits of extension, making it necessary to continue our descent in silent free-fall. As we drew level with the entrance to the moon pool, our grapples fired in unison and latched onto the doorway's massive lintel. Thus secured, the grappling lines retracted, drawing us inside the structure.

We wasted no time in shutting down the first force field blocking our path. However, the control pedestal would not release the Precursor key afterwards. I was a mite concerned about this development, since our progress through this complex could come to a screeching halt at any time for the want of a single key. Even so, we pressed onward. After determining that there were no immediate threats in this part of the facility, I split the squad into three pairs so that we could cover more ground during our search of the gun emplacement's labyrinthine corridors and colossal open spaces. For all its awe-inspiring grandeur, there is a forlorn air about this place; an overwhelming sensation of abandonment and an aching emptiness gnawing away at one's thoughts. Even though it was created within the span of living memory, this weapon looks and feels incredibly ancient.

About an hour later, we regrouped in the main atrium of the complex. Our efforts so far had turned up another three purple Precursor keys, a blue key, an orange key as well as several loose chunks of that green power crystal. All things considered, a sterling effort from everyone involved. IANTO has determined the precise location of the weapon's control centre, simply by scanning the energy flux that permeates the very fabric of this facility. There is also a second Precursor portal in here, and we'll probably be taking a closer look at these devices once we've taken care of that cannon.

Right now, we have another one of those 'interesting' situations that we occasionally encounter. We're standing at the entrance of an open shaft that plunges 90 metres straight down. Since there's no actual platform that raises and lowers, it's not an actual gravitic elevator shaft as such, leastways not of the type that we are used to. Sensors have detected the presence of a polarised graviton beam in the shaft, so it's a reasonable assumption that this is an alien version of a standard gravity-lift. Not entirely unheard of, since *Aurora* had dozens of similar transport systems onboard. So, it's a familiar technology in a slightly different form. However, that's not the problem. Our current point of concern is that our ExoSuits may be too heavy to make it down in one piece. There's no way of telling how much mass this system was originally calibrated to handle.

You're probably thinking that we should use our suit's thrusters to slow the descent, just in case.

One question: What happens if the shaft's graviton control systems register the suit's deceleration as an attempt to ascend against a downward force? I don't know about you, but there's a mental picture of an ExoSuit slamming into either end of this shaft that I find a wee bit disturbing. There's only one way to find out, I guess. If all else fails, there's always the grapple system to fall back on.

No pun intended.

DIGBY stepped forward. "Captain, I believe that I should be the one to make the first drop. As Tactical Operations Officer, it is one of my core responsibilities to assess all mission environments beforehand and advise you on the most appropriate courses of action. Your reluctance to order crew members into any potentially dangerous situation is greatly appreciated, though somewhat counter-productive in this particular case. With your permission, Sir?"

I nodded. "Well, you've got me dead to rights there, DIGBY old man... As you say, it's in your job description. I'll not be stepping on your toes, mate. By all means, proceed at your own discretion."

"Very good, Sir. I shall be transmitting a telemetry stream during my descent. If anything goes wrong, you should be able to use this data to avoid meeting the same set of failure conditions."

"Mate, if anything does go wrong, I'll be the first one diving down that shaft. You won't prang."

"Thank you, Sir. I shall endeavour to avoid having you leap to my rescue." DIGBY grinned.

With a brief nod of farewell, DIGBY turned smartly about and stepped into the shaft without hesitation. He hung suspended in mid-air for a couple of seconds, his ExoSuit rotating slowly as its centre of mass shifted relative to the deck far below. Suddenly, he disappeared.

Naturally, my first impulse was to sprint towards the gravity shaft and dive in after him. However, DIGBY's telemetry is still coming through loud and clear. His descent rate has stabilised at a leisurely 2.5 metres per second, comfortably well below the 9.82 metres per second, per second that spells impending doom for anyone or anything not previously equipped with a parachute or jump jets.

"How's your trip down going so far, DIGBY old son?" I enquired cheerfully.

"Remarkably enjoyable, Sir. We must build something like this in The Broch... Purely for recreational purposes, of course! I can easily imagine myself spending a great deal of my spare time in a variable gravity chamber, assuming that we had one. Ah, the end of the ride approaches. Pity."

"Hmm... Sounds like it might be a fun side-project. After we've sorted things out down here. It uses off-the-shelf technology, so I don't see any reason why we can't rig one up. I could even justify it as a micro-gravity training system for any colonists wanting to sign on as *Borealis*' hull technicians, although SCUBA diving is also a fair simulation of working in a null-g environment."

Come off it, Selkirk. It's not as if you'll cop any Management flak for goofing off in your own time.

"Bugger it, we'll make one just for fun." I declared at last. "Just a gentle reminder folks... If there's a couple of jumpsuits on the deck outside that gravity chamber, kindly use the intercom first, okay?"

Five minutes later, we all stood assembled at the bottom of the gravity shaft. When no-one else was watching, Héloise favoured me with a particularly *significant* smile and a sly wink. Apparently, she also feels that a null-gravity chamber in *The Broch* would be a splendid idea. Outrageous woman.

Oddly enough, the final pedestal accepted a purple Precursor key without raising any objections. Considering that we were about to enter the cannon's actual control centre, I found myself anticipating some kind of vigorous response to this incursion. No ear-piercing alarms. No flashing strobe lights. No devastating ambush by a swarm of heavily-armed security drones. Absolutely nothing. Somewhat disappointingly, the shimmering green force field deactivated as easily as a deck-head light. DIGBY advanced into the vast chamber, Gauss cannon held at the ready. After a thorough search of the area, he declared it safe for the rest of us to enter. Once inside, we dismounted our ExoSuits and took a short meal break, mainly for the benefit of Enzo and Héloise.

While DIGBY and IANTO patrolled the area on foot, JUNO and I walked over to examine a large pylon in the chamber's centre. As the quiet conversation between our human companions became muted by distance, the subdued background hum of alien machinery grew perceptibly louder as we approached the device's central pillar. We stood silently for a while, bathed in its kryptonite glow.

"I've seen something like this before," I remarked. "In the Precursor facility underneath the Lava Castle. It's a holographic data terminal and projection system. JUNO, say how-do to *Sky Watcher*."

Even as I uttered his name, the Precursor's holographic avatar began to materialise above us.

"*Warm seas, Father of Shells.*" *Sky Watcher* intoned gravely. "*Why have you entered this place?*"

"Warm seas, *Sky Watcher*." I replied. "Sky shells are coming. Sky shells to take Lost Ones from this place, come many tides from Lost One home beyond-sky. Lost One shells come and go this place for few tides, not stay. This one come to stop sky-fire. Make sky fire sleep, not break sky fire. This one wants stop sky fire burning Lost One shells."

Sky Watcher's avatar seemed utterly indifferent to this bold declaration. Somehow, its inscrutable alien features managed to convey a distinct impression that it didn't matter how eloquently I pleaded our case. Obviously, *Sky Watcher* required far more substantial proof than mere words could provide.

"*Sky shells bring seeds of Enemy, sky shells will burn.*" *Sky Watcher* said flatly. "*Father of Shells not make sky fire sleep. This one will taste Father of Shells deep life-stuff for Enemy seeds before sky fire sleeps.*" With a slight motion of his right talon, the hologram indicated a low pedestal set in front of the data terminal pylon. "*Father of Shells touch this place here... Make sky fire sleep.*"

I walked over to examine the pedestal. Reckon there's some sort of sensor gear in there, most probably a rig designed to check the genetic *bona fides* of anyone or anything intending to shut this cannon down. A raised square surface on the front of the pedestal had a distinctly button-like air about it, practically begging to be pushed. However, I'm not rising to such obvious bait, at least not quite yet. After all, I didn't come down in the last shower.

I sub-vocalised, addressing the crew. "*IANTO, DIGBY... Get everyone over here, but maintain a safe distance. Bring in the Exos and deploy them in a defensive formation, just in case. Events have just taken a rather curious turn.*"

After confirming that everyone was in position, I reached out and gently touched the square plate.

doot

Before I could react, a force field enveloped my right wrist and forearm, completely immobilising it. With a metallic hiss, a hose or cable of some kind detached itself from the pedestal and rose into the air, twisting and coiling with serpentine grace. *Okay. That's well beyond unnecessarily creepy.* Uneasily, I watched the disc at the cable's end apparently sniffing about my face and upper torso for a moment, then it tracked slowly down my arm.

With infinite menace, a large hypodermic needle emerged from the centre of the disc. Never been a huge fan of needles, although I was more dismayed by the bore of that spike. Five millimetres! *What the hell are they after? - A bloody core sample?*

Unfortunately, that's when my human side decided to kick in. Believe it or not, I panicked. However, it only took a few seconds of futile struggling to realise that my elbow joint and I would part company well before I overcame the restraining field's grip. Meanwhile, that wicked spike seized the moment, slamming into my forearm with roughly the same force as a .22 bullet. *Ouch.*

"*Not permitted.*" Sky Watcher snapped. "*You are not... Alive. You are a Made Thing. Machine.*"

"Oh aye, there's not too many who'd notice that." I muttered sourly. "Remind me to bring you up to date on non-invasive scanning technology sometime."

"*You are not like other machines here. This one senses tastes of life. Makes confusion in this one.*"

"Fair enough. No harm done, at any rate." I shrugged. "*Sky Watcher, we bring deep life-stuff taken from all Lost Ones touched by Enemy. Enemy seeds are all gone, all burned away. You taste.*"

"*Sky fire small talon will taste. This one must feel same taste as sky fire machine feels. Sky fire must feel same taste as Sky Watcher before sky fire sleeps.*"

Ah. Now I see what the problem is. There's a safeguard polling system that prevents the weapon from shutting down in error. The cannon's sensors are reading me as a machine, although *Sky Watcher* has reasonable doubts regarding my true nature. That's what you get for having internal systems that mimic certain biological processes rather too accurately.

IANTO placed the trays containing the colonists' blood sample phials within reach of the cannon's probe, wisely removing their protective caps first, so that the probe could access the contents without destroying them. To my surprise, the flexible proboscis passed delicately and methodically over the containers, dipping its sampling needle gently into each specimen in turn before moving on.

Naturally, we aren't expecting the cannon to shut down purely on the evidence of those samples, although this step was taken in anticipation of any questions that *Sky Watcher* might ask about the other colonists. This way, we can allow *Sky Watcher* to verify that all colonists have been exposed to the Kharaa pathogen, and that they are now completely free of any contagion. Admittedly, I wasn't particularly happy about handing over a significant cross-section of the human genome for an alien intelligence to examine in detail. For what it's worth, I don't think that the Precursors or their evolutionary successors are particularly interested in using that information against Terrans.

"*All are clean. Enemy is gone from deep life-stuff of Lost Ones.*" *Sky Watcher* announced at last.

I breathed a sigh of relief. That's one potential obstacle out of the way, at least. However, someone still has to push that button to shut down the cannon. Someone human. Fortunately, we have two.

There's just one small problem.

"Héloise, Enzo... It's all up to you now. Be warned, that probe's needle is going to hurt like billy-o. I can't order either of you to activate the shutdown button, although it still has to be done. I can't even risk administering a local anaesthetic beforehand, in case it screws up the probe's readings. Basically... Who wants to be stabbed?"

Héloise shrugged casually. "*Pfui*. It wouldn't be the first time, my Captain." With a wry chuckle, she hiked her thumb at Enzo. "*Regardez là*, the poor kid's turning green just thinking about it... Guess I'll have to do it anyway."

Without another word, Héloise strode purposefully towards the pedestal, unsealing the lower sleeve of her dive suit to expose her right forearm. She paused briefly, mentally preparing herself for the ordeal, then reached out to press the button. The force field activated, locking her arm into place. As before, the probe extended its hypodermic and searched for a place to strike. Contact.

"*Not permitted. Other life form is detected.*" *Sky Watcher* said flatly.

Héloise and I exchanged sheepish glances. *Whoops. Cat's well and truly out of the bag now.*

Gobsmacked by this sudden bombshell, Enzo could do little else but gape in stunned surprise. Naturally, the crew were grinning like Cheshire cats. After all, the modifications they installed during the recent rebuild of the old *corpus Selkirki* had made this feat possible. Without being too indelicate about this whole process, I guess you could say her pregnancy was a team effort. Incidentally, that beard modification was only a minor footnote on Héloise's wish-list.

"Yes, this one is carrying a child... Our daughter." I declared, not without a wee hint of pride.

"*Not possible. You are machine!*" *Sky Watcher* protested. "*You cannot create life.*"

"Technically, no. Let's just say that 2172 CE was a vintage year for human DNA. Mine, in particular."

"*This one does not understand your words, Father of Shells.*" *Sky Watcher* admitted.

"Alexander Selkirk saved deep life-stuff frozen in cold machine, *Sky Watcher*. This one used life-stuff to make new life, many, many tides later." I explained. Héloise stepped aside from the pedestal, cautiously cradling her right arm. I motioned to IANTO, and he passed me a med-kit. Surprisingly, there was no blood seeping from the deep puncture wound. No serious damage done to subdermal tissue, muscles or bone. I suspected that an absence of blood might be attributed to a localised coagulation effect applied by the probe. My own wound had already begun to fuse shut, although that was a sure sign that my nano-repair system already had the matter well in hand.

After tending to Héloise, I clapped Enzo heartily on his shoulder. "It's all down to you now, mate. Your moment to shine has come at last. Be magnificent."

Frankly, I'd hate to be in his shoes right now.

To his credit, Enzo only hesitated for a few seconds, then he was unsealing his sleeve and heading towards the pedestal in a completely businesslike manner. I followed alongside him, more for moral support than anything else. Héloise grinned fiercely at the lad as he passed, pumping her (good) fist in a 'Go get 'em, Tiger!' gesture calculated to inspire confidence. Only I could see his wretched expression, eyes half-closed in fearful dread. Standard Issue Blue Funk. Happens to the best of us.

"Buck up, laddie." I whispered. "It's going to be over in the blink of an eye. You can do this, Enzo."

I positioned Enzo directly in front of the pedestal, then moved to one side and turned to face him.

"In your own time, press yon button. Just keep your eyes fixed on mine, and you'll be okay."

Enzo nodded glumly, extending his trembling right hand towards the button. As soon as his fingers brushed against the button, the force field engaged. Sure of its mark now, the probe zeroed in on his forearm almost immediately. As its needle extruded and hung poised to strike, I popped the burning question. "Hey... What would be a good name for our baby? I'm fair tapped out for ideas."

Enzo blinked uncertainly, his intense concentration suddenly scattered to the winds. *Zap.* 'tis done. "*This one is clean. Sky fire sleep-word is accepted.*" *Sky Watcher* said. The restraining field dissipated at once, freeing Enzo's arm from the device. All colour had drained from his face, his jaw still locked in a tight grimace of pain. *Uh-oh, there he goes.* I caught him before he pitched face-first onto the deck, his legs buckling like a pair of over-cooked noodles. Classic shock reaction. You wouldn't believe how many folks go for the face-plant after donating blood, and it's not just the weedy ones, either. I've seen some burly He-Man types topple like felled trees at the sight of their own blood in a hypo-sampler. In no small way, Héloise and Enzo took one for the team today.

The control pedestal retracted silently into the deck, its task completed. I lowered Enzo into the recovery position and turned to face *Sky Watcher's* hologram.

"DIGBY, please attend to Mister Savini here. I need to have a few more words with *Sky Watcher.*"

"Aye, Sir." DIGBY replied briskly. He sprinted over to our position, med-kit held at the ready.

"*This one lives. Why does it not move?*" *Sky Watcher* asked, sounding a mite concerned for once.

"Och, just a wee fainting spell... No harm done. His shell is unbroken, *Sky Watcher.* This one sleeps."

"*That is good. This one meant no harm.*" *Sky Watcher* replied solicitously.

"That is good, *Sky Watcher.* All Lost Ones swim with you. You feed our minds with your words."

All social niceties are done and dusted. Now, down to brass tacks.

"Sky fire sleeps. Our sky-shells will come. Stay for few tides, then go. All make no harm to This Place. Soon after, this one takes all Lost Ones back to first home, far above-sky. Will sky fire break sky shells? Will *Sky Watcher* break sky shells?"

"*Sky fire sleeps until Enemy comes. Lost Ones are clean. Sky shells are clean, sky fire will not wake.*"

"This is good. These ones swim free by your words. Warm seas, *Sky Watcher.*"

"*Warm seas, Father of Shells. Swim free.*" *Sky Watcher* replied, adding a graceful gesture of respect.

I responded in kind, and his hologram simply faded away. Our business here is officially concluded.

"Welcome back to the land of the living, Ensign Savini." I said cheerily. "You came over a bit mazy back there, but you haven't missed much. As far as *Sky Watcher* is concerned, we're all free and clear to go. The quarantine has been lifted, thanks to you. By the by, let's not forget that Madame Maida also bravely stepped up to the mark, and was not found wanting. I conjure that calls for a wee jug-up before heading back to *The Broch*. What do you say, mates?"

For the time being, those Precursor portals can go and hang. I'm certain they would be all kinds of fascinating, but we've got far more important things to do now. As soon as we were back aboard and underway, I contacted Captain Halvorsen and informed him of the situation as it now stands.

"That's excellent news, Selkirk!" Halvorsen replied. "I can have a shuttle prepped within the hour. Do your people require anything by way of supplies? We might be able to spare some basic meds or sundry other items, but don't ask for deuterium or *pâte foie gras*. Anything else, no problem."

"Thanks for offering, Captain. We're good. However, I'll need you to transmit the blueprints and specs for that shuttle, purely on the off chance that something goes wrong. At the moment, we're heading in to the colony's pub for a wee dram. Got me a pair of wounded mariners sorely in need of a bracing pick-me-up. I'll resume contact with you as soon as we've docked. Selkirk out."

CHAPTER TWELVE

After docking at *Kaori-san no-shima*, the crew immediately headed off to enjoy some liquid R&R at *Margaritaville*. Even though Héloïse made me swear ringing oaths that I won't be long, I fully intend to join them later. There's still some urgent business with the *Carl Sagan* that needs to be addressed.

"Kaori-san no-shima Base to *Carl Sagan* Actual. Please respond."

"Halvorsen here. Proceed, Captain Selkirk."

"I have a few last-minute details for you, Captain Halvorsen. Remember, your shuttle must be unmanned and thoroughly decontaminated inside and out prior to launch. Please be advised that these are particularly important requirements. The Precursor weapon has been shut down and safe passage has been guaranteed by the entity controlling it. However, that safe passage agreement is contingent on a complete absence of viable Kharaa genetic material onboard. Incidentally, have any of your crew previously served active duty as Frontiersmen?"

"One moment, please. I'll check our records." Halvorsen replied. "Okay. That's a negative to your last, Captain Selkirk. No members of ship's company are recorded as having served with TSF in any capacity. Full civilian complement, all current medical records are uploading to your link now."

"Excellent. I've already received your shuttle data and blueprints, so we're good to go at this end. I'll be sending 500 litres of processed deuterium to tide you over for the time being, as well as two week's supply of immunization derms for your crew. Those derms need to be applied daily for five consecutive days to take effect. It's absolutely imperative that everyone aboard *Carl Sagan* receives this vaccine. No exceptions whatsoever. If any serious adverse reactions do occur, please cease treatment and advise us immediately. The Kharaa vaccine has manifested no side-effects so far, although it has only been used on a very small cross-section of population. Better safe than sorry."

"Received and understood, Captain. Has a suitable landing platform been prepared yet?"

"Affirmative. I am transmitting the approach vector and landing co-ordinates now. Please configure your shuttle's in-flight systems for handover of atmospheric entry and final approach under remote command at our end. Landing beacon transponder ID: Sierra, Alfa, Zero, One. '*Skull Island*.'"

"Data received. Under these circumstances, I fully understand your caution, Sir. There's far too much at stake for both of our crews. Shuttle *Sunbeam* will be prepped for launch immediately. Estimated transit time, 6.5 hours. Please accept our most sincere thanks for your able assistance."

"Thank you, Captain Halvorsen. Looking forward to having you join us. Godspeed to you all."

"And you also, Sir. Go join your mates and enjoy a cold one for me... Halvorsen, out."

The *craic* was nicely underway by the time I strolled into *Margaritaville*. Apart from a handful of colonists enjoying a quiet one before turning in for the night, the place was practically empty. I noted with approval that Héloise and Enzo were not quite screechers yet, although there were signs that they'd sunk at least two shots of the good stuff before wisely settling down on wine and beer. Their heads might be sore later on, but I figured it was best for everyone to unwind a bit tonight. Fair dos, considering things are starting to look up for once. Face it, almost every day on this planet has been an uphill battle so far, so we're well overdue for some sweetness and light. If all goes well in a little over six hours time, there should be more than enough reasons for everyone to celebrate.

"Howay, lads and lasses!" I boomed cheerfully. "Halvorsen says his shuttle's about to launch, and we can expect its arrival sometime shortly before dawn." I pecked Héloise fondly on the cheek and sat down beside her. "First order of business, a toast to ye all!" DIGBY nipped over to the bar and poured out a goodly measure of whisky, then darted back and set the brimming tumbler before me.

"Well spotted, that man. Man can't raise a toast without a wee nippie afore him. Thanks, old son." I waited until DIGBY had resumed his seat, then continued. "As I was saying, I'd like to propose a toast to your mighty works today. I could'na ask for more fearless companions. Hearts of oak, my jolly lads and lasses." I raised my glass, fit to burst with the genuine admiration I felt for them all.

The crew responded enthusiastically, downing their drinks in one go. After the toast, I excused myself from the table and quickly set up the crew with another round. By now, we had drawn the attention of other colonists in the bar, and I invited their group over to join us. I'd say 'total amazement' was a fair description of the colonists' reaction as they watched the holographic replay. However, when *Sky Watcher* announced that Héloise's scan was registering a second life-sign, that amazement turned instantly to good-natured disbelief as well as some fairly coarse jokes at my expense. Rather than spoil the moment, I simply bit the bullet and explained everything.

"Tsembe, mate, it's absolutely true. Scout's honour. Yes, I have fathered a child with Madame Maida. *Au naturel*, in actual fact." I said bluntly. "Nothing even remotely miraculous about it. All it needed was a few minutes of quiet time, a brisk flick of the wrist and a Svalbard Mark III genetic cryo-stasis pod. Granted, that chip off the old Selkirk block was made nigh on a century ago, but the pod's power-cells remained active and it functioned perfectly the whole time. Okay, so I might have

exceeded the recommended stasis period by 100 per cent, but I'm no' about tae ask for a refund. Those wee buggers thawed out nicely, and lo and behold, they still worked. Happy now?"

Tsembe Kala's face split in a toothy grin. "Makes sense to me *meneer*, but I still can't figure out why you'd bother saving your mojo way back when, specially without any women around at the time. Didn't your ship have clone tanks or something?"

I took a thoughtful sip of my drink before replying. "Oh, aye. Standard company procedure, mainly used when the Valkyrie Field fails. If we can't be revived normally, the material stored in the gene banks is used to create a clone, then it's just a matter of reloading the dearly departed's most recent memory template. Of course, there's no way I'd use stolen genetic material to create other humans. The ship's cloning tanks and memory archives were destroyed in the crash, anyway. Only 127 intact gene pods were recovered from *Aurora*, and they're going home to Terra. It's the least I could do."

There is an expectant silence in the air. In 20 minutes, *Sunbeam* will break atmo, and then we'll finally know if our efforts were worth it. I've dispatched a flight of aerial recon drones around *Pyramid Rock* to keep a close watch on the Precursor weapon, although I suspect that Sky Watcher will stand by his word and allow the shuttle safe passage. The final test of that word will come as *Borealis* takes flight. There's only one way to be certain. In the meantime, we'll probe the path ahead with all due caution. At some stage, someone will have to make a manned flight to determine whether or not we are truly free to leave this world. Héloise and I have already discussed this matter at great length, and a decision has been made. We shall make that flight together.

Ten minutes to go. High time I headed back to *Skull Island*'s Bridge. JUNO, IANTO and DIGBY are already at their stations, monitoring *Sunbeam*'s approach. A brisk pre-dawn breeze had sprung up, and I could sense that this blow would gather in strength as the day wore on. No matter. As soon as *Sunbeam* lands, turnaround and loading should only take us thirty minutes or so. Even so, those gathering whitecaps are a distinct sign that *Manannán*'s weather is beginning to deteriorate. According to data from our *Argus* weather satellite network, there's nothing significant brewing at the moment, although I'm strongly inclined to believe otherwise. An ocean makes its own weather as it sees fit. For all of our science, we are still at the mercy of this planet's capricious moods.

JUNO chanted the litany of *Sunbeam*'s fiery descent. "Altitude, 150 kilometres. RCS firing. De-orbit burn successful. Velocity, 6.5 kilometres per second. Aero-braking manoeuvres in progress. *Sunbeam* approach vector and angle for entry window is confirmed. Atmospheric entry sequence will commence in 5 seconds."

"Copy that. Inertial guidance systems are on track." IANTO replied. "Flight profile is nominal. Altitude 110 kilometres, velocity now at 4.2 kilometres per second. Hull ionization increasing. Transponder signal strength at 20 per cent and decreasing. Signal loss imminent. Telemetry blackout is confirmed. Start the clock."

The transmission blackout occurred bang on schedule. As *Sunbeam* penetrated the upper atmosphere at high speed, it generated a hypersonic shockwave that heated the surrounding air, forming a cloud of plasma around the vessel's outer hull. We expected that layer of ionized gas to play merry Hob with *Sunbeam*'s telemetry signals for at least 12 minutes, although it could last as long as 25 minutes. It's all a bit of a gamble at this point, since none of us have experienced a controlled atmospheric entry on this planet before, let alone remotely piloted a ship through one.

"*Sunbeam* appearing on visual track. Negative transponder signal detection. Current altitude, 75 kilometres. Velocity, 2.4 kilometres per second and decreasing. Distance, 50 kilometres downrange. Flight profile is within nominal ranges across the board."

Sunbeam dragged a flaming streak of sky in its wake, leaving a trail that stretched from the Eastern horizon to *Pyramid Rock*. Of course, this is only an optical illusion caused by forced perspective. *Sunbeam* is still a fair distance away, and it will have to lose much more altitude before lining up for its final approach. When it comes into that configuration at an altitude of 10 kilometres, it will have lost more than 90 per cent of its re-entry velocity and be within easy reach of the Precursor weapon. This is it.

"Altitude, sixty kilometres. Velocity, 1.8 kilometres per second. Forty kilometres downrange." IANTO said. "Transponder signal detected. Transmitting handshake. Negative response."

No real cause for concern yet. Sixty kilometres is still a shade too high for the hull ionization effects to completely dissipate. It's only eight minutes into the comms blackout, and *Sunbeam* is travelling close to 6,500 kilometres per hour. At this point, JUNO's automated approach program is constantly bleeding off velocity, bringing her airspeed down to a slightly more sedate pace, let's say thrice the speed of sound. Sometime around then, JUNO should be able to re-establish a direct command link.

It's not all gloom and doom. If we can't regain control of *Sunbeam*, it will continue its descent according to JUNO's preset flight program. If needs be, the shuttle can enter a stable holding pattern until control is restored.

"Altitude, fifty kilometres. Transponder signal acquired and locked. Handshake accepted. Over to you, JUNO."

"Acknowledged, IANTO. Remote command input is accepted. All flight systems parameters are within nominal tolerances. Telemetry link is solid. Deploying aerobrakes, preset to 5 degrees. Velocity decreasing... Six thousand. Altitude, forty kilometres. Thirty-five kilometres downrange. Velocity, five thousand. Aerobrakes set to 10 degrees, descent angle holding at 40 degrees. Velocity, four five hundred."

JUNO and IANTO have *Sunbeam* firmly in hand once more. I turned my attention to the shuttle's internal systems, occasionally glancing over at DIGBY's video feed from the recon drones. The Precursor weapon hasn't responded to *Sunbeam*'s approach so far, although the shuttle hasn't entered our notional 'Red Zone' yet. We're assuming that there's an upper engagement threshold of 20 kilometres for a vessel of *Sunbeam*'s size, travelling its current rate of descent. Even so, a near-miss would be quite sufficient to fry all of its systems. A direct hit would completely obliterate it.

So far, so good. Aerodynamic heating on all surfaces is well within design tolerances. There's a fair bit of vibration passing through the airframe, although this is also dead on spec for the shuttle's design. If there's any time we can predict the ride to get somewhat bumpy, this is it. Now that *Sunbeam* is falling through increasingly dense air, she's experiencing conditions known as 'Max-q'. Aerodynamic buffeting has reached its maximum level, and this situation will persist until the shuttle is able to transition into atmospheric flight mode. Right now, she's dropping like a spent bullet.

"Altitude, 25 kilometres. Velocity, two five zero-zero. Twenty kilometres downrange. Deploying primary airfoil surfaces. Aerobrakes set to fifteen degrees. Atmospheric engines are online. Turbines One and Two confirmed hot and spooling up. All flight systems are go for final approach."

Sunbeam had exchanged its fiery plumage for a pure white contrail as it plunged deeper into the atmosphere; an unwavering line painted boldly across the sky. Its vapour would merge with the clouds of this world, shielding it from all eyes save our own... And the unfathomable senses of *Sky Watcher*. Altitude, twenty kilometres. Velocity, eighteen hundred kilometres per hour. Fifteen kilometres out from *Skull Island*. All else that happens here will be decided in a handful of minutes.

"Transition to VTOL flight mode is complete. Lining up for final approach now, Sir."

"Looking good, JUNO. Bring her in on the deck. How's *Sky Watcher* travelling right now, DIGBY?"

"No response, Sir. No apparent activity in the weapon facility. Energy emissions are minimal."

"Just the way we want it." I said, cracking a relieved smile. "Looks like we're in the clear, folks."

Sunbeam touched down without incident. As the crew busied themselves loading cargo and refuelling the shuttle, I contacted Captain Halvorsen with the good news. It turned out I wasn't the only one chewing his nails during *Sunbeam*'s approach, figuratively at least. After all, there is a great deal riding on this trip's success. Five hundred litres of deuterium will not be enough fuel to keep *Carl Sagan* running for long, and the ship certainly won't make it back to the phase gate station at *Omicron Leonis* on that amount. In reality, it's only a token contribution to the *Carl Sagan*'s actual needs; a little something we've thrown in to make *Sunbeam*'s journey somewhat more worthwhile.

However, now that we've established that it is possible to land on *Manannán* (and presumably lift off again), Halvorsen will be able to dispatch his tankers on a regular schedule. It might be worth designating an area relatively devoid of sea life to make those seawater harvesting runs a bit more eco-friendly. Purely as a neighbourly gesture, of course. I'll do a detailed recon of the area surrounding *Skull Island*, just as soon as *Sunbeam* is safely underway once more.

After wrapping things up with Halvorsen, I made my way down to the pad to lend an extra pair of hands. My mood has lightened considerably since the *Carl Sagan*'s arrival, and it's only fair that I share the wealth. Pay some of that good feeling back down the line, so to speak. To this end, I'm sending back some choice party-starters along with the E-42 derms and deuterium. Five hundred litres of IANTO's '*Y Ddraig Goch*' - A vastly improved version of our Creepvine beer, a crate of assorted genuine French fizzies, plus a selection of home-cooked delicacies from our Iron Chef DIGBY. Since Halvorsen sounded particularly wistful when he mentioned *pâte de foie gras*, there's a couple of kilos of our smoked Peeper *pâte* thrown in for good measure. If their food is anything like some of the 'Chef's specials' we were served aboard *Aurora*, I'll wager they're all heartily sick of Cottage Pie and Tardigrade *velouté* by now.

We still have some time before accommodating *Carl Sagan's* shore-leave rotations becomes an issue. Even so, it's probably a good idea to start thinking about how we're going to work this. There's a bit of a social dilemma brewing here. Should there be an additional common area shared by the colonists and visitors, or should I keep both groups separate for the duration of their stay? I'm inclined to say that most of the colonists would be content staying with their own, although some of the younger colonists might prefer to mingle with the visitors. This is where it all becomes rather complicated.

Belters are essentially a tough-minded bunch of Reubens. Consequently, their attitude to personal relationships is astonishingly casual. If we throw a parcel of fresh young *Alterra* faces into the mix, add a few nipples of the strong stuff... Well, there's bound to be trouble. When a Belter man or woman spontaneously decides that they desire your company for the night, you'd be well advised to choose your next words *very* carefully. 'No.' is a perfectly acceptable reply, provided you're not playing head-games with them. Belters tend to interpret things quite literally. If you're already 'otherwise involved' and angling to change your luck, you had best hope your significant other is a particularly forgiving sort. Gorram it. I'll talk this shore leave business over with Captain Halvorsen. "Are we all set, then?" I gave *Sunbeam's* outer hull a final visual once-over, then patted a turbine housing fondly. "A dependable piece of kit, these old *Hermes*-class shuttles. Once *Sunbeam* lifts off, we'll get started on making one of our own. *Aurora* carried six of these, and I conjure they'll come in handy once we get back to Terra. Only one is required at the moment, though. We can worry about building the other five when we've got somewhere cosy to put them. Speaking of which, what's the projected completion time for the outer hull plating on *Borealis*, JUNO?"

JUNO replied with a smile. "One hundred and forty-five hours, Sir. All construction drones are currently operating at maximum capacity. Barring any unexpected incidents, internal fit-out, power systems installation and accommodation construction should commence shortly thereafter."

"Excellent. Right now, our only serious concern is the weather. If it holds out long enough for the *Sagan* to send down a few tankers, things will start cracking along nicely." I said, rubbing my hands together in satisfaction. "At any rate, we'll need to train up some willing bodies presently. Plenty of plumbing and cabling awaits their diligent attention, and that's something I'd prefer to see done by hand. JUNO and IANTO, if you'd kindly see to that, DIGBY and I will handle the recruitment and training of our engineering and operations support crews."

"Very good, Sir." JUNO replied. "All cargo has been loaded and secured. Refuelling operations and pre-flight checks are complete. *Sunbeam* stands ready for launch in all respects."

"Well then, we'd best send this one on its merry way." I said.

Once *Sunbeam* had cleared the pad, I strolled out onto the Bridge's observation deck. The shuttle is already a wee silver speck rising rapidly into *Manannán's* brilliant blue sky, its pure white contrails dispersing almost as soon as they formed. There's a special kind of sadness attached to watching a ship, any ship depart. Instead of the usual sensations of loss and regret as I watched it pass over the horizon, I experienced a profound feeling of relief. Although loneliness was a thing of the distant past, I still felt that an aching gulf of space separated me from a previous existence. More than

anything now, I wanted to return to familiar surroundings. Even the monotonous red ochre sands of *Mars* would be a welcome sight, although there is a far more seductive pull exerted by *Terra* itself. Like iron filings stirring in a magnetic field, I'm feeling the call of the old Home World.

I have definite plans for what we're going to do after returning to *Terra*. However, these plans are entirely dependent on what happens during the intervening time between our departure and arrival. The matter of repatriating our Belter colonists will need some careful thought. Some may wish to return to *Sol's* asteroid belt to address their familial obligations, while others might find themselves inclined to start an entirely new life on *Terra*. Some might even want to sign on as full-time crew aboard *Borealis*. The situation is entirely fluid at the moment, and I've been working on a number of contingency plans to suit the individual needs of each colonist upon our eventual return.

If nothing else, *Borealis* will always be there for them. I can see situations where our colonists may have nowhere else to go, and they're welcome to remain aboard as crew members. Of course, *Borealis* will need extensive work if she's recommissioned to follow in *Aurora's* wake, but we'll deal with that when the need arises. Our first mission upon returning to *Terra* will be legendary.

Coffee. Coffee is the answer.

I had swung by *Kaori-san no-shima* on my way over to *Skull Island*, intending to have a preliminary chat with the colony's committee members. Building a 'hotel' to house *Carl Sagan's* shore leave parties is our first order of business, although now might be a good time to raise the matter of recruiting specialist crew members for *Borealis* as well. We already have a solid complement of workers assigned to the ship's construction, and a fair percentage of them have the necessary skills sets to translate smoothly into operational support roles aboard *Borealis*. However, there is still a shortfall in available hands best suited for marine operations. The next phase is absolutely crucial to the success of the mission, and it will require at least 20 specially-trained divers. Trained as marine biologists, to be precise. Like it or not, we may have to draw a little deeper from the colony's well.

I had to laugh at the sheer absurdity of it all. A century ago, my only real concern was staying alive for just another hard-won day. Now, I'm having to deal with all the piddling minutiae of local government, human resources and civil works. A daft situation overall, and certainly not something that I could have ever predicted back then. Even so, the devil's in the detail. It's always that one tiny quirk that throws a spanner into the works, and I have to gracefully accept that this business isn't entirely about the nuts and bolts that hold a starship together. People are also involved.

The idea came to me almost insidiously, sneaking into my train of thought almost undetected. The committee meeting had gone smoothly, most of our business having been transacted as an informal discussion, held over a particularly splendid breakfast. This fact was not lost on me. Things definitely get done when folks are well fed and at their happiest, and the committee wasn't an exception. The simple act of breaking bread together can be a powerful source of social cohesion.

By extension, this principle could be applied to the shared common area where colonists and *Carl Sagan's* crew can interact with a reasonable degree of predictability. Whether it's a plain coffee shop, an austere monastic refectory or a full-blown restaurant is immaterial. Remove alcohol entirely from this equation, and any potential for social volatility will decrease accordingly. That's

the theory, at least. That's not to say we can expect smooth sailing all the way. All it takes is one bampot jacked up on ten mugs of Kona Blue, suddenly acquiring a supernatural ability to smell the colour Nine. Put it this way... If your body starts vibrating like a tuning fork, you will be served a complimentary cup of chamomile tea and politely shown the door. By someone wearing an ExoSuit.

On to more practical matters. *Disco Volante* and *Artemis* cruised slowly over bare basalt flats approximately three hundred metres SSW of *Skull Island*, performing a detailed census of all life forms in the area. Apart from a few Bonesharks and a sparse scattering of Spadefish, Reginalds, Hoopfish and Boomerangs, this location appears to be a suitable spot for *Carl Sagan's Percheron*-class tankers to load their cargos of seawater. Naturally, we'll need to prepare this site beforehand, although it looks like a straightforward operation. Scare off everything inside a 250-metre square perimeter, then keep them out with a combination of bubble-fences and directional ultrasonic transducers. With any luck, they'll all have scarpered well before the tankers arrive, although it wouldn't hurt to construct a decent-sized skimmer box around that well-head I'm planning to install today. Little fishies can make big problems inside the plumbing of a starship's deuterium extraction plant, and that's something that we can all live without. When all's said and done, a wee mickle of forethought now saves a mighty muckle of sweat later on. The devil's in those details, after all.

With the tanker transfer platform and well-head neatly ticked off my to-do list, Héloise and I returned to *Kaori-san no-shima* to scout out a likely spot for the planet's first (and hopefully, *only*) holiday resort. The major prerequisite for this site is that it should be close to the water's edge, but far enough removed from the main colony to ensure a measure of privacy for both groups. That could be tricky, since the colony's structures are evenly distributed around the entire circumference of the island, primarily for stability reasons. Bear in mind that *Kaori-san no-shima* is a floating island. Building a new housing complex on the main colony's foundation is a no-go, right from the start.

Looks like the island's lagoon has drawn the short straw. I've calculated that the resort's cluster of hab domes will fit comfortably inside this natural feature, without affecting the fine balance of forces currently keeping this island afloat. Of course, all of these structures are ultimately temporary. Once *Borealis* has been made habitable, everything we've attached to this island will be deconstructed and the materials reused elsewhere. If nothing else, I intend to make good on my promise to *Father of Tides*. Only the *Aurora* monument and *The Broch* will remain after we're gone.

In the final analysis, every small detail is worth the effort expended upon it. There is a sense of quickening in the air, one so palpable that even the colonists are feeling it. Halvorsen sent down six tankers this morning, and all made the return trip safely. *Margaritaville's* observation deck has been packed to capacity with colonists watching the tankers come and go since dawn, and the general feeling of anticipation running down here has lifted morale considerably. We still have a fair trot ahead of us before we're ready to launch, but the gears of industry are most definitely in motion.

Regarding small details... That mysterious little Cutefish revealed his greatest secret today. We've finally found out where the rest of his mates are hiding, and no-one was more surprised than I. After constructing a comfortable web-foam harness, I attached a miniature camera and tracking beacon to *Minou*, then turned him loose for his usual nightly constitutional. He wasn't overly fond of wearing this rig at first, but after taking a couple of bites from a soya-lentil crunch bar, he

obligingly forgot all about it. Until now, *Minou* has been swimming around in a network of specially designed aquaria aboard *Kaori-san no-shima*, generally delighting folks and coming and going as he pleases. Where he went each night became one of life's minor mysteries for all concerned.

There was a decent crowd in *Margaritaville* that evening, and I conjured *Minou's* journey might be worth putting up on the big screen. After all, that wee fellow has made quite an impression on the colonists, and there's a fair number of folk who'd like a Cutefish of their own. Mind you, I'm dead against keeping *Minou* or any of his pals in a closed aquarium, so I had to get creative with the basic design. Although he spends most of his time with Héloïse, *Minou* has free reign of a network of high-strength glass tubing threading a path through some of the colony's common areas and entertainment zones. This tubing connects to an underwater access lock that allows non-hostile species to enter and leave the network at will. A pair of repulsion cannon turrets ensure that the local nasties maintain a respectful distance from the facility. This arrangement beats a standard aquarium, hands down.

There's an archipelago of floating islands roughly northwest of Pyramid Rock, and that's apparently where he's heading tonight. After skilfully avoiding the myriad hazards of Creepvine thickets and the 'safe' shallows, *Minou* descended into a realm where we've never willingly set foot, or tarried any longer than was absolutely necessary. For one thing, that area is practically heaving with Bonesharks. *Minou* stopped dead in the water. According to sensor data transmitted from his body harness, the Cutefish is currently sitting at a depth of 82 metres. He's obviously waiting for the right moment to make his end-run to safety, as he's keeping a close watch on a pack of three Bonesharks cruising around the crown of the floating island. *Minou* moved forward cautiously, seemingly drifting under the influence of a particularly feeble current. When I switched to his rear-view camera, an almost imperceptible rippling of his tentacles appeared to be the sole source of his forward motion. Since Cutefish aren't equipped with siphons like terrestrial cephalopods such as octopuses, cuttlefish and squids, they lack water-jets as a mode of propulsion. It's tentacles all the way, unfortunately. However, Cutefish are clever enough to make the best possible use of what they *do* have.

Margaritaville's patrons watched *Minou's* steady progress in silent fascination. I had to manipulate the video feed in real-time to keep his surroundings visible. He was now close enough to the island to have fallen into its shadow, and I couldn't use the light sources on his harness for fear of giving away his position. A minute or so later, he began swimming normally, his apparent destination one of the larger stalactite-like structures scattered over the pockmarked underside of the island.

Suddenly, *Minou* darted into a fissure in the stalactite. There was a dizzying flurry of motion as the small creature twisted and turned its way through the convolutions of a pitch-black tunnel, following a path bored through solid rock by the larval stage of Floaters. The planet's floating islands are riddled with these holes. Naturally, IANTO was in full Sir David Attenborough mode at this point, enthusiastically describing the life-cycle of these bizarre growths and their role in *Manannán's* complex ecology. Admittedly, we haven't studied Floaters quite as thoroughly as we should have, although in our defence, we have been far too busy dealing with *Manannán's* other life forms.

The tunnel led into a spacious chamber, softly lit by a colourful profusion of bio-luminescent plants and algae. *Minou* swam over to a nearby patch of veined nettle and browsed on its foliage, obviously ravenous after his epic swim from *Kaori-no shima* to the Floating Islands. Given his small size, that trip would have involved a considerable expenditure of effort. There were other Cutefish in the chamber, although none of them were paying any particular attention to *Minou* at the moment. I confess that I had some misgivings about attaching that harness to him, since these contraptions usually disrupt a creature's natural movements and behaviour patterns. Worse still, some species of animals openly ostracise or even attack tagged individuals. Obviously, humans aren't the only pack of absolute bastards Nature has on its payroll. That's not a comforting thought.

Fortunately, *Minou's* mates turned out to be totally unfazed by his added 'extras'. After feeding, *Minou* swam over to a small group and began mingling with them. His skin pigmentation began to shift and swirl, so I switched to the reverse camera to give the audience a better look. His tentacles moved gracefully, almost seductively. This display triggered a similar response in some of the other Cutefish, although I'm uncertain whether this is some sort of greeting, a challenge to other males in the area or good old courtship behaviour. Even our life science brainbox IANTO is flying blind here.

Héloise clutched my arm, giggling delightedly. "Maybe *Minou* is looking for his *mam'selle*, no?"

"That's my best guess, Dear Heart." I admitted. "Our lad's most likely on the prowl. Lassies beware."

Eventually, one of the female Cutefish eagerly responded to *Minou's* suave advances. I'm not entirely certain whether pheromones were involved, or a more basic 'that looks like fun' attitude prevails among Cutefish. Suffice it to say, the orgy that ensued could only be described in terms of a rather dubious sub-genre of *manga*, one that caters for a *particular* taste in pictorial erotica. *Margaritaville's* patrons roared with laughter as the Cutefish coupled with chaotic abandon. The tavern's air rapidly filled with bawdy comments, cheering and cat-calling, scattering all semblance of decorum to the winds. As for the crew, JUNO and DIGBY were also having a quiet chuckle, although I suspect Héloise's colourful side commentary may have had something to do with that. Naturally, I also had trouble keeping a straight face. Only IANTO seems to be taking this spectacle seriously.

The number '5' appeared in the lower right corner of the tavern's video screen.

I looked enquiringly over at IANTO. "You're not keeping tally of all that bonking, are you?"

"Yes, Captain. I am. That figure represents the number of successful Cutefish couplings so far."

"All in the name of Science, naturally." I murmured sarcastically. "I count at least ten mated couples, although other Cutefish are entering that chamber. The party's already started, but they're still only fashionably late. Not to worry, though. There's still plenty of tentacles to go around."

IANTO shook his head slowly, entirely without condescension. "Correction, Sir... Cutefish males have a penis, or a physical structure analogous to one. You are mistaken in your assumption that specifically modified tentacles called spermatophores are involved in their mating process."

I nodded, casually acknowledging my error. "Fair dos. I stand corrected, then... Hmm. Wonder how our lad *Minou* is faring in this love-fest?"

IANTO grinned broadly. "Do you see that number on the screen, Sir? - I am exclusively tracking *Minou's* progress during this event. Five successful copulations within twelve minutes, forty-five seconds. A most impressive performance by terrestrial standards, wouldn't you say?"

"Bloody hell." I laughed. "He's a randy wee devil, that's for sure. Look, he's reached seven now!"
"As have the others, Sir. On average, their totals are strikingly similar, plus or minus 1.25 couplings."

There were now more than two hundred Cutefish churning around inside the chamber, with even more eager participants entering by the minute. No human eye could follow what was happening in there, and it became increasingly difficult to track the motion of any particular subject, let alone figuring out what *Minou* was doing by visual cues alone. Fortunately, his harness is still sending a steady stream of sensor data, and that should provide us with more coherent information on Cutefish mating behaviour. As a consequence of this unexpected breeding swarm, this event lost most of its visual appeal for the colonists in fairly short order. The images transmitted from *Minou*'s harness-cam now showed little more than a disorientating blur of grey and white flesh, interspersed with wildly flailing tentacles. When I cut the video feed to the tavern's main monitor, nary a soul uttered a word of complaint. It must have been a thoroughly humbling experience.

Even so, IANTO and I remained tapped into the video feed, mainly to keep a close eye on *Minou*'s well-being. With his current tally sitting on nine, I was starting to feel the first twinges of concern. Even rabbits need to take a breather, but our lad was still hard at work, along with everyone else. This can't be good for one's constitution.

Hang on. There's something screwy happening here. According to our observations so far, all of the participants should have mated successfully by now. Even taking late arrivals into account and assuming an approximate 1:1 male to female ratio, this should indeed be the case. However, the Cutefish breeding swarm is still going strong. Proximity readings from *Minou*'s harness sensors indicate that he is currently working his way to the outer edges of the mass, apparently retiring from the game, it seems. With twelve notches on his pistol tonight, he has acquitted himself admirably.

Sure enough, *Minou* emerged from the churning mass of Cutefish. He swam over to the far side of the chamber and began nibbling on a large patch of veined nettle. Five minutes later, he plunged back into the fray, apparently re-energised, obviously revved-up and raring to go. IANTO and I exchanged a look of stunned surprise.

"Well. This probably explains why Cutefish are always smiling." IANTO observed drily.

The following morning, IANTO and I trawled through the previous night's video feed, hoping to make some sense of this bizarre mating behaviour. If similar bacchanals take place every night, this does not bode well for the long-term survival of Cutefish as a species. Reproduction consumes a significant portion of an organism's physical resources, and a marathon performance such as that would have been an extremely costly exercise, in terms of caloric expenditure alone. Furthermore, there's no way of knowing what survival benefits (if any) might be gained from such indiscriminate mating, particularly when it's carried out on this scale. As a possible consequence, physically weaker Cutefish may have significantly increased chances of contributing genetic material to the community, a situation contrary to the usual order of things. Cutefish seem to be one of the more notable exceptions to this rule.

Teeth, spines and claws are Nature's weapons of choice. Unfortunately, Cutefish appear to have drawn an extremely short straw, survival-wise. As they are neither aggressive or even particularly well equipped for survival, Cutefish rely heavily on clever behaviour to overcome obstacles and avoid danger. According to IANTO, this innate cleverness extends to such things as their choice of habitat, some finer details of their social structure and an ability to form alliances with larger, non-hostile life forms. IANTO is convinced that their choice of the floating islands may have been a conscious decision on their part, as the safe shallows would be an extremely hazardous biome for Cutefish to colonise. For one thing, Bonesharks are practically sluggish compared to Stalkers.

There are obvious benefits to sharing a biome with a highly territorial predatory species, particularly when your species has worked out how to safely avoid them. Bonesharks also provide effective population control. Any Cutefish venturing outside the safety of a floating island would be entirely at their mercy. As last night's mating frenzy reached its peak, I inevitably found myself imagining their true nature revealed as tentacled Tribbles, giving rise to a nightmare of grinning, giggling Cutefish swarming into our bases. Not an entirely implausible conclusion, given the evidence presented so far. However, IANTO and I are more inclined to believe that we may have only witnessed an unusually intense social bonding ritual, as there are definitely aspects of this event that require a more detailed investigation. If my hunch is correct, the chemical properties of veined nettles might be the key to this mystery. To be absolutely certain, every aspect of their biome will be going under the microscope. Until we can pin down precisely what makes Cutefish tick, relocating any significant numbers of these creatures to *Kaori-san no-shima* or anywhere else could be a very, very bad idea. Let's get their natural checks and balances identified before we start messing with the natural order of things.

Big day ahead of us today. There's a *Percheron* freighter inbound from *Carl Sagan*, and she's carrying our first batch of tourists. Fortunately, we're not given to last-minute jitters around here. We've already completed our final walkthrough of their accommodation, and everything appears to be Bristol fashion and shipshape in there. All galleys are stocked, the Valkyrie field is operational and the kettle's on. We've named this place '*The Last Resort*', although I had a mind to call it '*Fawlty Towers*'. JUNO's suggestion won by unanimous vote, although I suspect that her shrewd use of logic may have interfered with the crew's final decision. Actually, I'm certain that most folk would 'get' that obscure reference, although she did raise a valid point about the name possibly lowering expectations among the facility's guests. In fact, *The Last Resort* should be a pleasant surprise for all but the most finicky of Sagan's jolly Jack-tars. Class-B berthing, single occupancy. A communal dining room and rec lounge with two autogalleys, unrestricted access to underwater recreation equipment, including AI-equipped Gen III dive suits and SeaGlide DPVs to keep our guests well out of harm's way.

Overall, we've aimed to capture the essence of a typical Club Med holiday, minus the cheesy seashell necklaces, luaus and other faux-Polynesian frippery, and added a distinct possibility of a close encounter with a Reaper Leviathan, among other equally memorable experiences. Incidentally, your jovial *maître d'hôtel* is a dead Martian cybnaut, and the resort's key staff are self-aware androids.

Enjoy your stay.

Manannán is an extremely dangerous place for the unwary. We've put together a comprehensive in-flight briefing package for our guests, complete with (frankly unsettling) depictions of what to expect if anyone decides to stray off the beaten track. Captain Halvorsen particularly enjoyed JUNO's catchy version of 'Dumb Ways To Die', a morbidly cheerful sign-off message to any rugged individuals who failed to pay attention during our modest safety briefing.

You might be wondering why we're expending so much effort on *Carl Sagan's* behalf. First off, there's not much effort involved in assembling and equipping the few temporary buildings required to house our guests. One day's work, in fact. This project has been completed without causing any significant disruptions to our work on the *Borealis*, and it's ultimately beneficial for both parties involved. *Carl Sagan's* crew get all the shore leave they could possibly need, and we eventually get to reap the benefit of having a happy and completely focused team working on our free ticket out of this system. Captain Halvorsen certainly appreciates our active participation in this venture, as it frees up a great deal of material and administrative resources at his end. Undoubtedly, *Carl Sagan's* shore parties would soon be taking casualties if left to their own devices. Our assistance planet-side has already advanced construction of the phase-gate by a whole week. Current projections indicate that we should be ready to jump at least six weeks ahead of the original completion date. Not bad.

"Skull Island ATC, this is Phantom Three-Zero-Niner turning on final approach."

"Roger that, Three-Zero-Niner. We have you on visual. Your approach vector is confirmed clear of all traffic, landing pad is clear. You may commence landing. Welcome to *Skull Island*." I replied.

"Copy that, *Skull Island*. See y'all in five. Three-Zero-Niner, out."

The massive *Percheron* freighter came in slowly at one hundred metres, the muted thunder of its turbines rising to a shriek as VTOL exhausts swivelled into their landing configuration. Touchdown. This seems like a good time to be hospitable, not just another disembodied voice on the comm-link. I conjured our guests wouldn't be expecting anything near this elaborate, especially since most frontier world stopovers take place in fairly dubious surroundings. Mining camps, sealed arcologies on black rocks and survey camps aren't exactly ideal tourist spots. Besides, I wanted to be present when *Phantom Three-Zero-Niner's* hatch opens, if only to catch the latest gossip from *Terra*. Captain Halvorsen has been forwarding Terran news updates regularly, although it's obvious that nothing much has changed over the last century or so. When Spacers meet and one asks the other how things are back on *Terra*, the traditional reply is "Still there. Still spinning."

As *Carl Sagan's* tourists disembarked, I noted with amusement that some of them practically bounced down the ramp with undisguised enthusiasm, while others took a considerably more cautious approach to their new surroundings. I'll bet some of them have taken our safety briefing entirely at its word, carrying on as if every life form on the planet was about to leap out of the water and latch onto some sweet Terran flesh. Rather than publicly ridicule these folks and dispel all sense of self-preservation, I silently applauded their common sense. *Manannán's* not exactly a Hell World, although you do have to keep your wits about you.

While JUNO, IANTO and DIGBY processed our tourists through the Valkyrie field, I spent some quality time examining the *Percheron* freighter. A few minutes into my inspection, I became aware of someone walking up behind me. I turned around slowly, since I'm probably in the wrong here. Best not to make any sudden movements at this point. "How do, mate. I'm Al Selkirk." I said

amiably, offering my hand to the solid-built fellow standing before me. He wore blue Alterra orbital fatigues with flight ops shoulder insignia and a non-regulation black trucker's cap, so it's a fair bet that the *Phantom 309* is his baby. As we shook hands, his suspicious expression mellowed almost immediately.

"A'hm Mack Beaudine. Saw y'all giving 309 a real deep eye dere. Held mah tongue 'til I figured out what y'all was playin' at, but ya didn't seem to be doin' 'er any harm. Conjured ya as a flyer or a fixer... So, what's ya basic story, *Cher*?"

Judging by his lingo, I'd guess Mack's a genuine Cajun. Born and raised in Louisiana, back on *Terra*.

"It's a long one, Mack." I admitted. "Don't know what your Captain's told you about *Aurora*, but I'm the only survivor. Used to be Third Engineer aboard the *Aurora*. Been marooned here since 2171. Died three times since, but that was more than enough for the lesson to sink in. Made myself some new friends." I nodded in the crew's direction. "Found a few more under a rock, literally speaking. Belter colonists, originally brought here by Torgaljinn Corp. There's about 75 of them at present, although that number's steadily on the rise. And there's our latest project over yonder... *Borealis*."

Mack whistled appreciatively. "Coo! Y'all bin *beaucoup* busy heah, *m'sieur*. Ain't seen a pee-stop dis fahn since *Tannhäuser Gate*." Suddenly, Mack's stomach gurgled loudly. He chuckled at his intestinal indiscretion, swatting his tattle-tale belly with the cap. "Hush yo' mouth in dere!" After a few seconds of awkward silence, Mack spoke his mind. "Don't s'pose y'all kin spare a bro *p'tit cafe*?"

I grinned. "Sure can. Reckon you could use a bite tae eat too, by the sound of it. Turnaround on the 309 will take at least a couple of hours, so you might as well take a gander at our facilities. The ferry to *Kaori-san no-shima* should be leaving soon. We can hitch a ride over with your mates."

The motor-launch *Sleipnir* is a recent addition to our fleet. Since we have no need for another submersible personnel transport, she's designed for surface travel. With a top speed of 40 knots, *Sleipnir* isn't particularly fast, although her MHD drive system makes her an extremely quiet surface vessel. A most desirable feature, when you're passing near Reaper territory on a regular basis. When things start to get ugly, *Sleipnir* simply makes a run for it. If absolutely necessary, *Sleipnir* can defend itself with a stasis field array and a pair of repulsion cannon turrets, but only as long as it takes for a *Cyclops* to arrive. Obviously, I nixed the idea of giving her a glass bottom right from the start. Nothing says '*Smörgåsbord*' quite like giving a Reaper a clear view of what's on the menu.

Fortunately, our local weather forecast looks fairly pleasant for the next couple of days. There's some nasty weather brewing about 600 clicks to the west, although our *Argus* satellite cluster is keeping a close watch on its progress. In a month or so from now, the weather will take a definite turn for the worse. After that, the best that we can hope for is a few clear days between each major blow. It's going to play hell with *Borealis*' construction schedule, not to mention making these visitor transfers a somewhat hairy business, at least until *The Last Resort* is equipped with its own submarine docking collar. That was a deliberate omission on my part, since I thought we could transfer our visitors on the surface and do away with the usual hoo-ha associated with travelling submerged in potentially hostile waters. Looks like I might have to rethink this procedure after all.

Borealis has reached a particularly awkward stage in its construction. I could make the outer hull absolutely watertight right now if I wanted to, but with perihelion just around the corner, this might prevent the submersion of its construction platform. *Borealis* should be okay, although the construction dock wouldn't even survive a Category II cyclone if it remains in its current location. This means that the whole shebang will have to be moved into deeper water and the sealed ship's hull heavily ballasted to counteract most of its buoyancy. Rather than pump in a couple of hundred thousand tonnes of seawater onboard to submerge *Borealis*, it might be a more practical idea to store all construction materials aboard her and install a gravity compensation system to keep the dock and hull firmly anchored to the seafloor. A foul-weather anchorage has already been prepared in 200 metres of water, so it's just a matter of relocating our wee Meccano set 1.5 kilometres northwest of its current position. Best to get this one done while we still have semi-reasonable weather. At least it will give our guests something vaguely interesting to watch while they're here.

We disembarked at *The Last Resort*'s docking platform, then proceeded along the glass corridor connecting the port facility with the hotel's main foyer. Cave crawlers remain a constant nuisance on this island, although we've managed to secure a number of decently-sized open spaces against their incursions. Anyone wishing to explore other locations on the island are welcome to do so, provided that all guests travel in groups of four or more persons, and carry at least one propulsion cannon and/or stasis rifle, plus sufficient food, water and first-aid kits. Any intrepid individuals will have to swallow their pride for the duration of their stay. Solo adventures are expressly forbidden.

I offered a few words of welcome to our guests, then headed over to *Café Krakatoa* with Mack in tow. He confided that he wasn't officially scheduled for R&R for at least another two weeks, so I felt particularly sorry for this chap. Might as well make it worth his while in the meantime, although I'll have to install some decent amenities at *Skull Island* for the convenience of *Carl Sagan*'s other pilots. It's not much fun kicking around out there, particularly when everyone else is whooping it up. "Looks like we've got the place all to ourselves, at least for the time being." I said cheerfully.

Café Krakatoa has scrubbed up quite nicely after all, a far cry from the traditional company-issue break rooms found aboard most Alterra vessels. We want *Carl Sagan*'s crew to feel like they can unwind properly while they're staying on *Manannán*, minus all those incessant reminders that they're still technically on The Company's clock. Nothing kills a good time faster than being reminded that Monday is always lurking around the corner. 'Monday' doesn't exist here. Never will.

The café's decor borrows heavily from every islander cliché in the book, I'm pleased to say. The main entrance is flanked by an imposing pair of Easter Island *moai*, laser-cut from three-metre high blocks of nanocrete. Entirely out of place, of course. Inside, there's enough woven thatch, flickering holographic torches, grimacing *He-Tiki* and fake bamboo furniture to provide *Café Krakatoa*'s with an unashamedly cheesy ambience, although there are also some subtle reminders that *Manannán* itself should be taken somewhat more seriously. Necklaces of Stalker teeth, several potted Tiger Plants (holograms, of course) and the occasional set of gaping predator jaws have been scattered about as decorative notes, an effective counterpoint to the surrealism of the underlying metaphor.

Apparently, this 3D joke was not lost on Mack. He immediately burst into a fit of delighted laughter. "Gilligan's Island! *Incroyable!* Ah loves dis place already!"

At a more conscious level, *Café Krakatoa* has been played strictly for laughs, a good-natured parody of a lone castaway's attempts at makeshift hospitality. Naturally, as I had access to immensely superior technology the entire time I've been marooned, the reality of my survival situation is vastly different to what has been presented here. Still, it wouldn't hurt to germinate a few wildly inaccurate stories about my first few months on this planet, would it?

"So, Mack... What can I get for you today?" I said, activating the autogalley.

Mack leaned on the galley's counter and examined the menu, stroking his stubbled chin pensively.

"*Mais*, got me a *gros envie* for a Po'Boy sammich, any kin' will do. But y'all don't seem to have one heah." He murmured sadly. "S'pose ah kin come at a burger an' chips, tho' it won't be the same."

That sounds like a heartfelt cry for help. Only too happy to oblige.

I grinned, cracking my knuckles purposefully. "Not a problem, *mon ami*. Just give me the basic specs of your favourite Po'Boy, and I'll whip one up for you, *toute de suite*."

The beatific expression that dawned on Mack's face was priceless. I can tell that this fellow enjoys proper food with an honest gusto, one that transcends the base act of shovelling generic fuel into a body that has long ceased to care. Not a *gourmand* by any stretch of the imagination, but one of those rare folk who still derive genuine pleasure from eating. These days, an actual *Chef* is rarer still.

Mack leaned forward urgently, almost conspiratorially.

"First off, there's yo' basic Po'Boy. Fill 'em wit' de fried swimps, fish, *poulet*, *porc*, *boeuf*, whatevah. It's de bread that matters. Un *baguette*. Crusty on de outsides, but she sof' inside. Got that, *Cher*?"

"Sure have." I chuckled, entering Mack's description into the terminal. "Sounds pretty damn good."

"*Oui*. Better dan de awful bag-nasty ah ate afore leavin' *Carl Sagan*, near six hour ago. Some kin' a salad. No gorram body to it, and def'nitely no ackshul meat ah recognized. *Honteux*, dat's fo' *sure*."

"Shameful indeed." I commiserated. "So, what else is involved? What sort of fixings are included?"

Mack grinned wolfishly. "Ah, dat's where she gets *très intéressant*... Whatevah de hell y'all wants. A nice hot *boudin*, *remoulade*, sauce piquante, chargrilled bell peppers or jes' plain ol' gravy. Go nuts."

"I can work with that." I said, compiling the recipe. "Okay, let's see what happens. Stand back."

I have to admit, Mack's passionate description of these sandwiches also gave me a mad case of the hungers. There's nothing particularly fancy about these sandwiches, although Mack assures me that everything depends on a harmonious assembly of specific traditional ingredients. Pure comfort food, by the sound of it. The autogalley pondered long and hard over the selections I'd made, then began constructing its first two prototypes of the legendary New Orleans Po'Boy sandwich.

When the autogalley chimed to announce it had completed its cycle, Mack solemnly removed the platter and cast a critical eye over the towering pair of overstuffed French rolls. One contained beef. The other, a generous serve of lightly breaded fried shrimp. My moment of truth is at hand.

Mack nodded curtly. "Y'all got the bread right. Thin, crispy crust outside, all sof' inside. Dressin's look good too. Got de mayo, sliced tomato, lettuce, pickles and gravy laid in de raht orda, an' ah kin smell un *p'tit* hot sauce. So far, so good, *mon ami*. Yo' *boeuf debris* looks and smells fahn. Ain't some kin' a sloppy, ovah-boilt mess a body wouldn't put in tacos. *Trés bon*... An 'now fo' de real test."

I watched with polite interest as Mack skilfully worked his way though this precarious tower of bread, meat and condiments. His serious expression gave nothing away, and I felt it grossly impolite

to ask what he thought of the meal so far. I returned to the autogalley and punched up a duplicate serve for myself, adding two tall glasses of iced lantern fruit juice. I returned to the table and placed one of the glasses alongside Mack's plate before sitting down. He nodded gratefully, pausing to take a small sip of the juice. This time, his inscrutable expression slipped, albeit briefly. Clearly, our local jungle-juice was something that his palate hadn't quite expected. *Score one to me.*

"*Mais*, that's some damn tasty stuff raht dere... *Qu' Est-ce que c'est?*"

"It's called lantern fruit, one of this planet's more enjoyable delicacies. Its taste reminds me of kiwifruit, but there's a hint of mango in there as well. Took a gamble, thought you might like it."

As I was about to take my first bite, Héloïse sauntered in. Mack goggled in alarm, hurriedly mopping his gravy-smeared lips with a napkin, while attempting to stand up at the same time. Fortunately, he was able to accomplish this feat with a fair degree of panache. Héloïse smiled sweetly, obviously flattered by Mack's charming display of gallantry, accepting his compliment with good grace.

"Ah, there you are, my Captain." Héloïse said briskly. "*Khorosho*. After you've introduced me to your *bon ami*, you can help get this place set up. Our guests will be arriving any minute now."

Upon hearing this, Mack practically braced to attention. "Maxim Philippe Beaudine... *À votre service, mam'selle*. Since it's mah fault dey's a mess in heah, ah'll lend a hand also."

"I like this one, *Chérie*. Can we keep him?" Héloïse giggled.

Reluctantly, I took a quick bite from each of my Po'Boys and fed them into the galley's recycling chute. Mack appears to be made of sterner material, resolutely hanging onto his shrimp sandwich with one hand and re-arranging furniture with the other. Didn't spill a single crumb of it, either.

Halfway back to *Skull Island*, Mack finally delivered his verdict. As expected, he was brutally honest. "Le'mme see... De beef was damn fahn. She an 8 or 8.5, easy. Dose swimps was a tad rubbery, but dey still good an' spicy. Ah gives yo' a straight-up seven." Picking up on my obvious disappointment, he added, "If dat soun's too harsh, y'all 'member mah *Carl Sagan* salad was a lousy *one*."

Mack and I shook hands at *Phantom 309*'s gangway. He must have thought this a fairly lukewarm gesture under the circumstances, as he kissed both cheeks and swept me up in a brotherly bear-hug instead. Just before he turned to leave, I pressed a high-capacity Mempat into his hand.

"*Un petit cadeau*. Pass this on to Captain Halvorsen with my compliments. I'm certain everyone aboard the *Carl Sagan* will appreciate what's in there. Have your Data Systems chief look it over to confirm that the base codes are still compatible, but I conjure there won't be any major problems."

Mack regarded the slab of crystal curiously, turning it over in his large hands. "*Qu' Est-ce que c'est?*" I chuckled gently. "The answer to every homesick Spacer's prayers, *mon ami*. A proper taste of Home. There's a suite of advanced fabrication routines for your autogalleys on that chip, plus a totally redesigned user interface and more recipes than you'd ever dare imagine. Your Purser's going to hate my guts for this, but that's a risk I'm prepared to take."

"Heh. His commissary bonus be lookin' real slim afore this trip's ovah, das fo' sure." Mack agreed.

"Anyway, you take care of yourself, Mack. Give me a call anytime you're passing though, okay?"

"Will do, Captain. Send mah regards to *mam'selle* Héloïse, *Cher*. Catch y'all on de flip sahd!"

Ten minutes later, *Phantom 309* blasted clear of the pad. Another 50,000 tonnes of seawater on its way back to the *Carl Sagan*, and another eventful day done and dusted. I felt a quiet satisfaction with the way things had panned out today. My chance meeting with Mack Beaudine has set a small but significant sequence of events in motion. A minor act of gleeful insurrection, in actual fact.

Face it, there's only so much that can be done to make a company starship feel like 'home'. *Aurora* had its little village squares and restaurants, and I suppose *Carl Sagan* also has similar arrangements onboard. However, there is one major flaw in Alterra's half-hearted solution to the problem of homesick employees. It lacks any real depth. Their solution relies on only one point of stimulus. Reproductions of familiar buildings might trigger a vague sense of nostalgia, but I have always suspected that it would not satisfy that aching, lonely void that grows inside a body too far from home. Oddly enough, I've been comparatively lucky in that regard. I've been too busy surviving to give it that much thought. Until now.

Mack's whirlwind visit has drawn my attention to a thorny problem that plagues all long-duration missions. It's homesickness. True, there may be some hardy folk out there who revel in this isolation, but there are many others who bear the full brunt of finding themselves a ridiculous distance from hearth and home. Given sufficient time, that knowledge will corrode your soul.

The real tragedy is that Spacers are denied most of the psychological anchors that serve to ease the pain of long-term separation. Beyond a certain distance, all meaningful communication with family and friends ceases abruptly. At first, a lonely Spacer can seek some solace in videos of loved ones, but even these measures lose their efficacy over any extended length of time. We need to delve deeper into the human psyche, soothe its more primal instincts before working on surface emotions.

Carl Sagan will be in this system for the best part of a year. Every day, the crew will line up for meals and be dealt their regulation serve of approximate food analogues. This might keep a body running, but it does absolutely nothing to feed their souls. This is not a fit way to treat the men and women putting their lives on the line to extend Humanity's reach into the cosmos. With that one Mempat, I'm hoping to make their lives just a wee bit brighter. One tiny act of rebellion. I aim to misbehave. Things have calmed down a little more now. Our guests from *Carl Sagan* have finally settled into some semblance of order, and we've progressed from unbridled chaos to a reasonably orderly three-ringed circus. I think it might have something to do with the water. There's rather a lot of it here.

JUNO has been shepherding a group of first-time divers over the past two days, and her current mood might be charitably described as 'terse'. One particular little charmer persisted in ignoring his suit AI's warnings, and JUNO ripped him a superfluous orifice. Naturally, he filed a formal complaint. With me. Big mistake.

After reviewing his suit's telemetry data and PDA recordings, I duly convened a Captain's Mast. As a courtesy, these proceedings were broad-waved to Captain Halvorsen. To cut a long story short, this specimen's smug assurance crumbled when his own Captain called him a "senseless waste of DNA", then confined him to quarters for the duration of his stay. Halvorsen transmitted his personal response to this incident over *The Last Resort's* video link, adding that my crew are now officially recognised as command-level Alterra officers of the Merchant Service, fully entitled to the same rights of courtesy one would normally extend to human officers of equivalent rank. Nice.

That was yesterday. Today, we're onboard the construction dock, almost ready make The Big Move.

"Reactors One through Four are online, Sir. Power is holding steady at twenty per cent of output."

"Copy that. Increase to forty per cent, DIGBY. Deploy outriggers. Propulsion systems are online."

"Outriggers fully deployed, Sir. Thrusters are set to station-keeping. Awaiting further orders."

"Sonar, Conn. Confirm our course clearance for heading three-one-five, Mister Savini."

"Conn, sonar aye. Three biological contacts detected, Sir. Reefback pod is approaching our position on vector two-zero-zero. Speed steady at two point five knots. Range, three hundred."

I swore under my breath. "Too close. IANTO, send in the *Makos*. Predator mode. Lasers only."

"Makos away, Sir." IANTO replied. "Time to intercept, ten seconds."

Three *Mako* fighter subs streaked ahead of the dock, homing in on the Reefbacks. That pod has been hanging around the area since dawn, and I can't wait for them to make up their bloody minds. A few stinging shots and convincing Boneshark impersonations should see them off. I've no mind to cause them any serious harm, but it's better than *Borealis* wearing these hulking great oafs as hood ornaments. In the worst possible scenario, they could tear off several propulsion nacelles, then we'd really be up that creek without a paddle. And I hardly need remind you... This is one BIG canoe.

"Reefbacks dispersing, Sir. *Makos* are returning to establish a patrol pattern at intercept point."

"JUNO, release docking clamps and commence ascent. Rate, 0.5 metres per second."

"Aye, Sir. Clamps are fully disengaged. Neutral buoyancy set. Activating ascent systems, rate 0.5."

With only the faintest sensation of motion, the construction dock rose slowly from the seafloor. Tremendous forces are being called into play at this moment, and it will require my complete attention to ensure that these forces are kept in equilibrium within extremely fine tolerances. If one section of the dock's hull rises just a few millimetres faster in relation to its neighbouring components, it could easily lead to a catastrophic structural failure. Even though this massive structure has been carefully engineered to perform its specific tasks, it still has absolute operational limits that cannot ever be exceeded. I know the risks involved in this operation. A clearly defined margin for error does exist. It's close enough to zero to scare the living daylights out of you.

"Mass compensators are online. Stand by to cast off."

This is the tricky bit. I'm watching the readouts from over 450 structural stress transducers, and this next operation will make the needles bounce around some. Actually, the data is entirely digital, and all I really have to worry about are the two holographic models that represent *Borealis* and the construction dock. As long as both models remain in the green, everything's fine. Isolated patches of yellow are a cause for mild concern. Amber means that some component isn't one hundred per cent happy. Red anywhere on either of those models means that we might as well call it a day. Game over.

"Cast off on Bow and stern lines. Set mass compensators to 10 per cent."

"Bow and stern lines are free, Sir. Mass compensators are set at 10 per cent. Systems nominal."

"Very good, DIGBY. Release amidships, fore and aft spring lines."

"Aye, Sir. We are free and clear of our moorings. Awaiting further orders." DIGBY responded.

As mentioned previously, this dock wasn't really intended to travel any appreciable distance across the ocean. Think of the *Borealis* as a raw egg and the dockyard as a skeletal framework of uncooked spaghetti supporting that egg. Our dockyard is a modified version of an orbital graving dock, so I'm fairly certain that the original design wasn't intended for manoeuvres in an aqueous environment. Still, here we are. Standing on the raggedy edge of its design tolerances.

"Run all reactors up to eighty-five per cent. Set mass compensators to thirty per cent of output."

"Aye Sir. Reactors are coming up to mark. Mass compensators increasing to thirty, 0.5 increments." I watched both holographic models intently, waiting for the first signs of impending disaster. Sections of the dock flashed yellow as *Borealis* redistributed its artificially-altered mass over the dock's structure. Without taking this crucial step, it would be impossible to overcome its inertia and move the dock more than a few metres before the entire structure tore itself to pieces. If *Borealis'* mass were decreased any more than a mere thirty per cent, the dock could flex beyond its design limits as it moved through the water. We're definitely walking on a slender tight-rope here.

"Retract all mooring lines. Bow thrusters engaged. Commencing sequential thruster activation."

One million, seven hundred and fifty thousand tonnes of mass began to move. The very act of applying power to a single pair of bow thrusters sent a shiver of yellow through the dock's hologram, although *Borealis* remained a reassuring green. As soon as the readings settled down, I activated the rest of the dock's thrusters to take up the strain. We aren't aiming to break any speed records here, and you can forget about cornering. That isn't going to happen. All we have to do is forge ahead for the next 1.5 kilometres, hopefully without this painfully slow juggernaut falling apart in the process.

Luck has lingered by our side today. The sea remained as flat as glass throughout our transit. Our track deviated an acceptable 10 millimetres over the entire distance, and we were able to re-anchor the construction dock without encountering any further problems. Our next job is to ballast *Borealis* with its construction materials, finish sealing its hull and then submerge the whole shooting match. And not a moment too soon, it seems. According to the last data set beamed from the *Argus* satellite network, that wandering weather system to the west has developed into a Category IV cyclone, and it's heading straight for us. Looks like it's time to batten down the hatches and break out the ol' *Monopoly* set, me hearties.

Converting a starship into a submarine is slightly easier than it sounds. This was my intention right from the beginning, although the approaching cyclone has forced an urgent change in our schedule. We have only eighteen hours remaining before the storm's leading edge arrives. Fortunately, all remaining hull penetrations can be sealed immediately, but this means that any large internal components will have to be fabricated 'on the spot'. At least the four neutron accelerator silos salvaged from *Aurora* are already installed on board, so that's one major headache out of the way.

As a matter of fact, I'm looking at them right now. The interior of *Borealis* is as bare as Mother Hubbard's proverbial cupboard, save for that immense shielded structure sitting amidships of the drive chamber's foundation. There's a disorientating maze of structural girders holding the hull together, but there's not much else in here yet. It's a sight vaguely reminiscent of a zeppelin's internal works. Our next order of business is to begin shoring up this structure with decking plates

and additional bracing members. Although this phase would have taken place during the normal course of construction, it now requires a major revision of our project schedule to accommodate the structural modifications necessary for deep submersion. Originally, only 40 per cent of *Borealis* was intended to remain standing above the waterline. That would have been sufficient for construction purposes, as it provides a similar working environment that one might encounter in an orbital dockyard.

Our fleet of construction drones has quadrupled overnight. Currently, nearly all of the latest batch are engaged in transferring as much raw material as possible from *Skull Island's* storage bunkers. The original squadron of construction drones have been assigned to complete remaining structural reinforcement work and prepare additional ballast tanks, supplementing those compartments already constructed for potable freshwater storage. This will effectively double *Borealis'* water storage capacity. Rather than waste any seawater pumped onboard as ballast, I have decided to set up another deuterium extraction plant as a direct supply point for the vessel's pair of auxiliary fusion reactors. JUNO, IANTO and DIGBY are working on those reactors right now, but we've still a fair way to go before human feet can safely walk these decks.

Right now, the *Borealis* is a bewildering hive of furious activity. Drones are whirring hither and yon, fabricating new sections of girders and internal hull plating. The air inside is rank with the metallic tang of ionization, an unwelcome side effect of their nano-lathing operations. Nitrogen dioxide levels in here are currently running at 150 parts per million. Unprotected human lungs would rapidly discover that this concentration is less than conducive to a long and happy life. Consequently, my next job is to build an air scrubber and chemical reclamation facility, since I've no intention of releasing toxic levels of NO₂ into *Manannán's* atmosphere. In all probability, the storm will release significantly greater volumes of this gas once the lightning begins, but I prefer to avoid deliberately contaminating the atmosphere. I believe we can use this reclaimed gas to make industrial quantities of nitric acid, a vicious little brew that harks back to the early days of space flight.

Borealis now has an internal power supply. After connecting both reactors to a bare-bones power distribution network, the crew and I constructed a temporary command bridge. We definitely need a central control point for the next phase of this operation, submerging the *Borealis* and its construction dock 200 metres beneath the ocean. Only six hours remain before the cyclone strikes. Topside, the sky grows steadily darker and winds are gusting to forty knots. I can already hear the rising storm swell as it pounds against the outer hull. A relentless Titan, hammering upon our shell. I activated my external commlink. "Enzo, how're ye holding up out there?"

Enzo had remained at his station in the construction dock's control module. Until we can get the ship's temporary command centre operational, Enzo is serving as our link-man. We're effectively blind inside *Borealis* at the moment, since there's practically no instrumentation in here. However, another ten minute's work should see this show up and running.

"It's pretty rough, Sir." Enzo replied. "Inertial damping systems are barely coping with the present sea state, and having *Borealis* riding high isn't helping at all. That's a lot of sail area. And now for the bad news... Wind speed is increasing, now gusting up to 50 knots. Lightning is clearly visible on the horizon, currently putting out fifteen-plus strikes per minute. Estimated time remaining before contact with the squall line's leading edge is twenty-five minutes."

"Right, then. Sounds like it's time for ye to skedaddle home, Laddie. I'm bringing a *Seamoth* around to the main airlock. No sense hanging about until it's too late to bail. You would'na fancy this party anyhow. The place is near empty, there's only one lass and the atmosphere's bloody terrible." Enzo chuckled. "You're not kidding, Sir. According to your last set of air readings, a standard dive suit wouldn't last ten minutes in there, and that's only two minutes more than a breathing-mix regulator and its supply hoses... *Molto male, Signore!* That's it from me, I'm *outta* here. *Ciao!*" "Copy that, mate. We'll catch ye topside in a couple of hours." I replied.

"All systems are operational, Captain." JUNO said finally. "Mass compensators engaged, rate 0.05." "External and internal ballast control systems are interlocked and ready to submerge. Mooring line controllers are slaved into primary descent control, retrieval mode only. Set for zero load threshold." "Roger that, DIGBY. Buoyancy control is green across my board... Do we have a go, JUNO?" "Affirmative, Sir. Neutral buoyancy has been achieved without exceeding structural limits of either vehicle. Fifteen point two per cent of ballast tank capacity remaining. We are clear to proceed." "All drones are standing by at damage control stations. Submerge."

One final glance through the topside cameras was enough. The entire western horizon is a solid mass of boiling black cloud, shot through with searing flashes of lightning. The air is thick with wind-driven spray and foam, a once-placid ocean now whipped into a chaotic frenzy by gale force winds. Even with the inertial dampers operating at maximum, I can feel the green rollers slamming heavily into *Borealis'* bow. Another few minutes of this punishing assault would be more than the dock's structure could safely withstand. Time has run out. We now commit ourselves to the deep.

Passing fifty metres. Most of the buffeting has died down. *Borealis* shudders faintly in its docking cradle as its superstructure bears the full fury of the tempest. My readouts flicker and flare with each passing wave, a dizzying cascade of numbers whispering that all is well. We slip deeper into the canyon below, passing beyond the worst of the cyclone's furious reach.

One hundred metres. The very fabric of *Borealis* mutters and groans around us. My numbers have begun to whisper in less reassuring tones. We have traded the cyclone's blunt, mindless rage for something infinitely more patient, though no less brutal in the certainty that it offers. With each metre that slips by, water pressure notes the distance travelled, quietly adding just a few more kilograms per square metre to our final tally. The inexorable grip tightens. Such admirable diligence.

One hundred and twenty metres. Our descent comes to a sudden halt. *Borealis* is screaming. "Hull breach imminent. Starboard level Sierra, sections five through eight. Drones responding." "Port Tango, section two. Probability of structural failure, eighty-nine point three per cent." "Commencing ascent to one-zero-zero metres. Environmental loading on upper hull is increasing." The drones worked swiftly, fabricating additional Plasteel reinforcing plates on and around each of the weakened sections to shore them up. We are practically caught between the Devil and the Deep Blue Sea here; *Borealis* cannot completely submerge until its lower half is strengthened sufficiently to withstand the water pressure at a depth of 200 metres. Twenty atmospheres. That's 203 tonnes per square metre, incidentally. A considerably greater pressure than your average starship hull is designed to withstand. As the drones worked on the affected sections, I noticed that the stress concentrators instantly migrated to unreinforced sections, exponentially increasing in severity.

A quick series of calculations confirmed my suspicions. This is not the safest way to proceed. Even at our reduced depth, there is a very real chance that a fatal hull breach could occur without warning.

"Change of plan, troops." I said. "I've reconfigured the damage control protocol. Rather than have the drones chasing their tails shoring up potential hull breaches before they occur, they have been reprogrammed to lay down a continuous pattern of reinforcement panels during descent. Just a few more minutes are needed to secure the most vulnerable sections, and then we can take her down."

"A wise decision, Captain." JUNO observed. "As *Borealis* still lacks decking and all internal bulkheads, its total structural integrity is severely compromised at present. In addition, highly adverse weather conditions encountered during submersion have clearly exceeded your original design parameters. We have no choice but to proceed."

"JUNO, you're just saying that to make me feel better. I should have increased the hull integrity safety margin by another twenty per cent, at least. That's some damned sloppy work. Inexcusable." JUNO didn't seem to think so. "Your original design specifications are entirely valid, Captain. Our current situation is merely a result of this weather system failing to cooperate. Chaos happens, Sir."

"Don't I know it." I agreed morosely. "Still, we're going to end up with a *Dreadnaught* battlecruiser with all of that hull reinforcement going in. Could make certain folks back on Terra feel more than a mite itchy when it drops into low orbit. Questions may be asked. Rather pointed questions."

DIGBY chimed in with a cheeky grin. "In that case, speak softly and carry a big stick, Sir."

Twenty minutes later, our descent resumed. Our entire complement of drones are busily fabricating Plasteel panels in a diamond pattern from the keel up, choking off hull stresses before they could form elsewhere. As each linear run of reinforcement was completed, ninety per cent of the drones commenced work on the next level, leaving the remaining ten percent to fill in the voids. It's oddly satisfying to see drones working in unison like this. This sight reminds me of watching an old weaving loom at work. Fascinating.

Two hundred metres. *Borealis* is all but silent, save for the muted hum of drones working high overhead. My structural integrity readout has ceased panicking, its amber warning flashes fading through yellow to green as the hull becomes increasingly more secure. Overhead, the cyclone has reached its utmost height of fury. I don't have to see the ocean's surface churned into foam by screaming winds to know this. No drone could survive the hellish conditions topside, so I'm having to rely on data relayed from the network of pressure transducers mounted on *Borealis'* hull. With a wee bit of manipulation, those matter-of-fact numbers become a chaotic vista of peaks and troughs that mirror conditions on the surface with absolute fidelity. Force 12 winds on the Beaufort Scale, mountainous seas and a sky ripped apart by continuous lightning. As we huddle inside this metal shell, *Manannán's* wrath roars and rages above our heads. I can do no more to restrain his hand.

I activated the UQC, fingers crossed. "Selkirk to *Kaori-san no-shima* Base. What is your status?"

"Savini here, Sir. ALECTO ordered an evacuation of all personnel. We're bunkered down in *The Bastion* right now, as well as everyone from *Carl Sagan's* shore party. Conditions are a bit cramped in here, but we're managing just fine. How's *Borealis* holding up?"

"We've got about another ten minutes work before the hull is completely locked down, then we'll return to the island. Speaking of which, I conjure you've probably drifted halfway to the Shallows by now. Towing that island back into position will be a right royal pain in the bahookie."

"That won't be necessary, Captain." Enzo interjected. "The island hasn't budged a centimetre. I've been monitoring it for drift since I got back, and there's been no change in our position. From what I saw before we lost the surface cameras, it's *un disastro* upstairs. Most of the island's vegetation has been hammered flat or washed away on that side. The wind has died down a bit, but that's just the eye of the cyclone passing over. Its estimated transit time is twenty-five minutes."

"No drift, ye say?" I replied sceptically. "That's bloody peculiar. As long as everyone is safe in there, that's my only concern right now. We'll put that mystery on the back-burner for the time being."

This cyclone is playing havoc with our remote systems. I can't establish a stable link with ALECTO to obtain a first-hand analysis of the situation. Fortunately, Enzo appears to have things under control.

"One moment, Sir... Structural integrity has failed on the weather side of the island. We've lost some hab modules and all mariculture beds in the west, northwest and southwest sectors, but everything on the lee side is shielded from the worst of it. All interior bulkheads were secured after the evacuation and repair drones have been assigned to damage control stations. It might sound pretty bad, but we're still basically okay. ALECTO has done most of the hard work for me, Sir."

"That's what he's there for, mate." I said evenly. "Even so, you're doing a magnificent job up there. Unfortunately, there's not a gorram thing we can do to help you right now. If conditions start getting dicey up there, don't hesitate to pile everyone aboard *Exodus* and head straight for *The Broch*. You make the evacuation call as you see fit. Got that?"

"Aye, Sir." Enzo replied. "*Exodus* is already prepped and standing by for launch. Stage Two evacuation trigger points are seismic activity or early signs of structural imbalance developing in the island. Apart from the cyclone's effects, conditions have remained within acceptable limits, Sir."

"Your application of personal initiative is duly noted, Mister Savini. Well done."

"Grazie, Captain." Enzo replied gratefully.

No need to run silent, but we certainly ran deep on our way back. The wind may have slowed a piece to catch its breath, although the heaving grey sea rolls on unabated. *Ulysses* approached *Kaori-san no-shima* at a depth of 150 metres, then rose slowly to connect with one of the base's docking collars. Surface turbulence started to kick in around the 50 metre mark. Even with its dynamic positioning system engaged, *Ulysses* couldn't remain in position long enough for the docking clamps to latch onto it. One aborted approach was enough. In the end, I bottomed *Ulysses* well clear of *Kaori-san no-shima* and we swam over to *The Bastion's* lower airlock.

Nothing even remotely fancy in here. *The Bastion* is a last-ditch survival shelter, pure and simple. This self-contained facility was built to provide basic life support and Class D accommodation for 100 souls. Assuming that *Manannán's* ocean and atmosphere remain unaffected by any catastrophes of relatively modest magnitude, this shelter is able to provide air, food and water for an indefinite period. Downside is, your allocation of 'personal space' is roughly the size of a bunk bed. If you aren't a huge fan of capsule hotels, you definitely won't enjoy staying too long in *The Bastion*. Sorry.

"Be warned, it's a reet mess oot there. Just be extra mindful of where ye tread. The western side o' the island copped a fair hidin' last night, and some of the outer paths may have been washed clean awa'. It's probably best that ye stay close to the main complex for now, at least until me and the crew have scoped out the new lie of the land. Any questions? None? - Verra weel, off ye go, then."

So much for my post-cyclone safety briefing. There's no need to bang on about something as blatantly obvious as the aftermath of a Category IV tempest. Our colonists are no strangers to adversity, and *Carl Sagan's* shore party is largely comprised of experienced Spacers, rendering any further commentary and a consequent list of dire cautions entirely unnecessary. Naturally, our guests are still a bit rattled after last night's ordeal, although I suspect that the stoic 'business as usual' attitude that prevails among our colonists should have them calmed down in no time.

All things considered, we weathered the first cyclone of this season tolerably well. Sixty-two per cent of the island's hab ring survived relatively unscathed. On the debit side of our ledger, we lost a third of the island's mariculture facilities, although this will have no noticeable impact on our food reserves. Due to their sheltered locations, *Margaritaville*, *The Last Resort* and *Café Krakatoa* are only superficially damaged, although we'll have to thoroughly inspect all of the island's structures before signing off on their structural integrity. We'll reinforce what we can, or redesign and rebuild everything else that we can't.

That's our basic problem. There isn't much that humanity can build that Nature can't destroy. Only the Pyramids of Egypt and Mesoamerica can claim any real sort of durability. Even so, they're looking a mite worse for wear these days. If a single seed can force its way through solid concrete in search of sunlight, everything man has ever built is the butt of a cosmic joke, at least as far as Nature is concerned. However, I'm not so certain about those structures that the Precursors left behind. Their enigmatic materials seem to resist the decay of ages, impossibly shielded against the slow, relentless sword of entropy. In all good conscience, I can't leave this planet without learning something tangible about Precursor technology... If only to salvage our bruised human pride.

Before commencing a cleanup effort or any major repairs, our first job is to assess the damage to the colony's base and determine whether the island itself is still structurally sound. While everyone else settled down to a leisurely *al fresco* breakfast, we were busily reconfiguring our ExoSuits for a geotechnical survey expedition. Something tells me that a terrain resonance imaging scan might be a very bad idea, and that setting off any seismic charges would only compound our current crop of problems. It's definitely a job for ground-penetrating radar in this case. The ExoSuits are of course, a timely anticipation of The Unexpected. Fortunately, we tend to expect that these days.

My first transit of the island took me past the former site of the *Magellan* expedition's surface base camp. Though long gone now, that pathetic cluster of flattened hab domes would have made a powerful statement to any would-be conquerors of this world.

You have no dominion over this place, Human. You never shall. Leave or die.

All that remains of their sad mistake is a commemorative plaque. Back then, I even went to the trouble of stabilizing the treacherous cliff-face that had killed them. Last night's cyclone must have seen my feeble efforts here and decided that the planet's message needed clarification. Landslide. I dismounted my ExoSuit and proceeded to inspect the scree of loose soil, mangled plant matter and rubble from a safe distance. The brow of that cliff is highly unstable, so I'm wary of approaching any closer than is absolutely necessary. The landslip had carried away most of my previous terraforming

work, dumping a half-buried jumble of geotextile matting and bent titanium reinforcement rods at the foot of the cliff. As far as I'm able to determine, some large celery trees had grown precariously close to the edge, and all it needed was a strong wind to lever them out and bring the whole shebang crashing down again. In retrospect, it would have been a more sensible plan to revegetate the top of that ridge, instead of allowing natural processes to determine what plants grew up there. Obviously, Mother Nature wanted celery trees. Reckon I can safely chalk this one up to bad luck.

There's no real point in trying to patch up that cliff face once more. If it wants to slip, it will, regardless of any remedial measures that I care to employ. Besides, our remaining time on this planet would be more profitably spent undoing as much human damage as possible before making our courteous exit. Fortunately, the majority of *Aurora's* wreckage has already been accounted for, leaving only the base installations and production facilities on *Kaori-san no-shima*, *Skull Island* and *Pyramid Rock*. All of these will be removed at an appropriate time. Aside from the *Aurora* monument, all other overt signs of human occupation will be squared away before our departure.

My commlink beeped urgently. DIGBY. "Captain, you'll want to see this. Southeast sector. JUNO and IANTO have also been notified and are currently inbound. Transmitting my coordinates now." "Roger that. On my way, mate." I replied.

Before boarding *Gawain*, I took a geo-probe from my backpack and shoved its tail-spike into a patch of undisturbed soil near the foot of the cliff. DIGBY and Co. were only about half a klick away, so it was worth taking a few more seconds to finish my work here. If this island's on the brink of falling apart, I'll want to know well in advance.

Gawain's footing became less certain as I neared DIGBY's location. Torrential rainfall had scoured away large sections of the sketchy footpath that meandered through the undergrowth, making it necessary veer a fair distance inland and negotiate a hopeless tangle of flattened vegetation. As I rounded the base of South Hill, I caught sight of the others and made a beeline straight for them. "Howay, troops." I said cheerfully. "What's up?"

DIGBY indicated a point roughly one-quarter of the way up the slope of South Hill. "Captain, a small section of this hill subsided during the cyclone. GPR scans indicate the presence of a large void beyond that opening. During a cursory examination of this site, I detected an energy signature consistent with the presence of Precursor technology. I strongly recommend that we investigate." "Absolutely." I grinned. "There's always time to spare for thrilling heroics. Let's have at it, then."

The opening had to be enlarged slightly to admit our ExoSuits, although there was no apparent danger of any further soil movement. Even so, I scanned the parent rock surrounding the hole and found it to be perfectly stable. Judging by the relatively small pile of rubble that had fallen into the hole, a dense mat of vegetation had grown over this opening and accumulated a thin crust of soil, effectively hiding it from casual observation. I had no idea that this cavern existed, since we've had no real need to conduct a detailed scan of the island until today. The last time we scanned, our only concern was making sure that the island's underside was structurally secure before fabricating the colony's foundation plates, so it's easy to see how this managed to remain undiscovered for so long.

As much as I wanted to explore this new Precursor facility, there are far more urgent matters that require our undivided attention. Reluctantly, I marked the cave's location on the survey grid and we resumed our GPR sweep of the island. I suspect that the crew were also a bit disappointed, as this sub-surface scanning business rapidly turns into a dull-grey grind after only a few minutes on the job. Still, it has to be done. Last night's storm has done an almighty number on the island, and there's no telling what could happen if we shirked this task in favour of playing hooky in a cave.

So far, our ground-penetrating radar scans have revealed no serious structural damage to the island, aside from the inevitable washouts that occurred along its entire western face. Approximately eighty-five per cent of the island has been mapped at this moment, so it is now reasonably safe to make a start on the cleanup operation. I estimate that a couple of *Ripleys* and a standard squad of six repair drones can tackle the topside work. It's all clearance and biomass conversion anyway, something that I can oversee without unduly diverting my attention from this insanely boring scanning job. Mind you, I'm extremely relieved that it *has* been totally uninteresting so far. Any 'interesting' readings would be most unwelcome during this particular exercise.

I activated *The Broch*'s vehicle fabricator via remote access, instructing it to produce two *Ripleys* and a squad of repair drones. We'll also need a bioreactor and a biomass protein converter built topside, so that the drones can make good use of the mass of destroyed plant material currently littering the island. The *Ripleys* will make short work of any big stuff like Celery Trees and Bulbos, rendering it into a more convenient form for the bioreactor and protein converter to use. Waste not, want not.

However, all sub-surface repair work will definitely require our direct attention. If the recon drone's depressing video feed is anything to go by, it's not going to be a simple matter of spraying our handheld Fabricators about with wild abandon. The colony's western quadrant has been comprehensively hammered, and that mad tangle of wreckage will need to be carefully teased apart before any repairs can be made. Structural stresses on any intact base modules could become a very serious issue at some point. Thankfully, ALECTO and Enzo managed to isolate the worst of those damaged sections with some timely use of emergency bulkheads and sacrificial flooding. If all goes well, *Kaori-san no-shima* Base should become operational again sometime around nightfall. At the very worst, our colonists and *Carl Sagan*'s contingent will have to rub shoulders in *The Bastion* for one more night. Surprisingly, these two groups appear to be getting along quite well, all things considered. So much for my earlier concerns about any potential incompatibility. Seems like there's nothing like a wee touch of shared adversity to bring folks together.

It's difficult to be an engineer and still remain optimistic. Last night's cyclone was merely a prelude to *Manannán*'s climatic excesses. This planet's 12-year orbital period generates a wildly variable range of weather conditions as it approaches perihelion. One or two weeks of relatively pleasant weather is sufficient to send ocean surface temperatures soaring, whipping up ferocious storms that can form within minutes and last for weeks at a time. This has not been a significant problem in the past, as we've all been safely tucked away in *The Broch* as that insane weather raged far overhead. Even though I've honestly tried to account for the worst possible conditions while designing *Kaori-san no-shima* Base, I'm dismally unsure that its structure will withstand another storm. This realisation is tempered by a certainty that nothing wrought by man stands in the face of Nature's fury. If it were at all possible to force-shield the entire island, we could rebuild here with impunity.

By the time we returned to the colony's surface facilities, *Taranis* had surfaced and looked to be off-loading the robotic cleanup crew I'd summoned earlier. During our absence, Héloïse and Enzo had rounded up a few dozen willing hands and started clearing debris from the surrounding area. Hand-held Fabricators flared and hummed, deleting damaged exterior components from *The Last Resort* and *Café Krakatoa*, then replacing them with new versions reconstructed at the molecular level. I noted with satisfaction that the majority of repairs were being made on viewport storm shutters, rather than the habitat modules themselves. Some of the shutters bore impressive dents, while others had simply jammed in their tracks after being slammed by the storm's playthings last night. The main thing is that those shutters worked exactly as they were supposed to.

It's great to see everyone pitching in like this. The *Carl Sagan* party were at the forefront, carving up fallen celery trees, lantern trees and bulbos with laser cutters, stacking the trimmed sections in neat piles for later removal. Others carried away bag-loads of storm-flayed undergrowth, slowly but surely increasing the cleared space forming around the colony's surface buildings. I signalled the crew to dismount and continue on foot. ExoSuits and pedestrians are generally an unhealthy mix of traffic, and that goes double for *Ripleys*. It looks like matters are nicely in hand here anyway.

The general mood here seems surprisingly light-hearted. It feels more like a working-bee on a neighbour's farm than the aftermath of a natural disaster. I guess that a bit of honest physical labour sits well with our guests. Some pragmatic folks might even consider this effort more mentally stimulating than cranking dead weights and pounding away on treadmills to nowhere. That's fine by me, although I can't see storm cleanup being a hot ticket item as one of *The Last Resort's* regular recreational activities. Even so, with roughly nine months of severe weather still ahead of us, it might be worth up-selling this idea to our future guests. I'm kidding, of course.

All things considered, we've been extremely fortunate after the first serious blow of the cyclone season. No deaths, no reported casualties and an acceptable level of damage inflicted on the facilities here. This is the best possible outcome, at least as far as I'm concerned.

I found Héloïse standing ankle-deep in a swampy hollow, carving up a fallen stand of celery trees. She appeared to be enjoying herself immensely, if the saucy ditty she sang was any indication. Héloïse waved cheerfully as I approached, then carried on hurling metre-long sections of trunk aside without giving too much of a damn where they landed. Hmm. This might not be an ideal time to lecture her on a course of physical exercises more suited to her 'delicate condition'.

"*Bonjour, mam'selle*. I must say ye're looking particularly radiant today." I said, bowing gallantly.

"Kiss-arse." Héloïse snorted, wiping her mud-speckled face with a sweat rag. "Hoy, got any water?"

"Sure, catch." I under-armed a litre of purified water to her. She caught it effortlessly, unscrewed the stopper, and took a long drink. "Can't stay for too long, Love. We're heading out to fix the west quadrant hab domes soon, and I wanted to catch up with ye first."

"I see." Héloïse said quietly. "Is there something about this job you're not telling me?"

"Nothing particularly ominous, at any rate." I grinned. "We haven't had much time to ourselves lately, and I just wanted to see you again, that's all." I waded into the shallow pool and wrapped my arms gently about her for a long-overdue cuddle. "It's going to get better, Lass. I swear it."

Héloïse smiled ruefully. "I really hope so. I want to leave this planet so much, it's almost madness... Why is it taking so long?" Her fists pounded my chest in frustration. "*Merde!... J'ai envie de crier!*"

Two days passed before things returned to an even keel around here. At least Captain Halvorsen had the decency to ask before sending another shore-leave party down. I informed him that the weather probably wouldn't be getting any better for quite a while, so he might as well make use of our facilities while conditions are still relatively favourable. Fortunately, that last cyclone gave us a clear picture of how *Manannán's* extreme weather systems behave, and our *Argus* satellite constellation has been reprogrammed to provide considerably advanced warnings in future. The colony's base has been rebuilt and reinforced accordingly, paying particular attention to previous structural failure data. Technically, the base can now withstand a Category V cyclone, although that's not an assertion I'd care to put to the test. If there's another heavy blow coming in, we'll shepherd everyone straight into *The Bastion* without hesitation.

For the time being, we've decided to focus our attention on those Precursor facilities. Work on the *Borealis* has been stepped up to account for lost construction time during the cyclone, although it's more a case of working her into a habitable condition as quickly as possible. In fact, she weathered the storm magnificently, convincing me that the ship would serve as an ideal base of operations after its initial fit-out. Life aboard might seem a bit rough and ready at first, although the colonists would soon have access to vastly improved living conditions. Even more importantly, there will be functional shipboard systems that can be used to train our colonial volunteers, and that will shave months off our pre-flight preparation time. If *Borealis* is ready to launch before the phase gate is assembled and fully operational, there's no reason why we can't use that spare time to give her an absolutely thorough shakedown cruise before finally committing ourselves to The Black.

After breakfast, we assembled at the cave mouth. Time for a wee spot of spelunking. Our basic plan is to check out the cave on *Kaori-san no-shima* first, then move on to explore as many known Precursor facilities as possible. Until now, we have maintained a 'look, but don't touch' approach to these sites, mainly because there were other unfortunate events popping off in the background. Terribly inconvenient for anyone with an inquiring mind, I must say. This time, we are loaded for bear. We're treating this expedition as our last hurrah, one final adventure before we have to knuckle down to the serious business of leaving *Manannán*. Naturally, Héloise and Enzo begged to come along. I advised otherwise, but they wouldn't hear a word of it. Apparently, their shared experience at the Quarantine Enforcement Platform wasn't quite nasty enough to dissuade them from taking another jolly stroll through Precursor territory. Fine. At least I bothered to warn them.

The opening had formed ten metres above the cavern floor, making it necessary to abseil down with our ExoSuit grappling lines. I descended first, scanning the landing zone with GPR before touching down. Readings indicated that the ground could safely support the combined mass of our suits, although it would be necessary to scan the path ahead before proceeding across any of the natural arches that lay deeper in the cavern. There is a clearly-defined pathway running through this place, although I couldn't detect any signs that it had been used. No footprints or any visible scuffing of the soil. Just a bare, scraped path completely devoid of any vegetation. Extremely curious.

Motion ahead. Multiple targets. Sensor readings are inconclusive, although the closest possible match suggests that a few Cave Crawlers might be scuttling around down here. Not a huge surprise. Naturally, my abiding love of those wee buggers has not diminished with the passage of time. Repulsion cannons, hot. Safeties off. I'm feeling particularly creative today.

They aren't Cave Crawlers. They are Precursor servo-mechs, made to resemble the aforementioned scavengers of carrion. Although these mechanisms simply scanned us on approach and appear to be ignoring our presence for the moment, I suspect that this attitude could change in an instant if we interfered with their activities. I've just seen one dispatch a real Cave Crawler with extreme prejudice, using some kind of particle beam. It then used this beam to repair the energy conduit that the Cave Crawler had been nibbling on, patching damage caused by the creature's mandibles and its powerful digestive enzymes. Pest control and maintenance, all in one compact package.

We'll give these wee chaps a sensibly wide berth from now on. As long as we don't bollocks up anything down here, I conjure we'll be safe enough. We passed through those mechs without incident, following the path as it led deeper into the cavern. Like most other caverns on Manannán, this one was softly lit by a variety of bioluminescent plants, creating the sort of Fairyland that could lure its fair share of wide-eyed innocents into thinking that all was sweetness and light down here. A quick trip through the Valkyrie Field would soon convince them otherwise. Once we've finished poking around, I'll have to secure this cavern's entrances against unauthorised entry. We're extremely lucky that we found this place before one of the colonists or *Carl Sagan's* visitors did.

A Precursor portal arch dominated the central cavern. As we mounted the archway's massive support platform, a control pedestal rose silently from the facility's ornate floor. A small box on top of the pedestal opened, revealing an aperture apparently designed to accept a Precursor ion power crystal. We had acquired two of these crystals during our last expedition to the gun emplacement on *Pyramid Rock*, along with three of those cumbersome purple key artifacts. It would have been pointless to plan any serious exploration of Precursor sites without having them on hand. DIGBY retrieved one of the crystals from his suit's external storage locker and stood beside the pedestal.

"Everyone stand well clear of this thing, just in case." I cautioned. "There could be an energy discharge from the portal when the system activates. All clear? Good. Okay, DIGBY... Fire it up."

"Aye, Sir." DIGBY installed the crystal in the pedestal. The portal's hidden mechanisms emitted a low-pitched hum as the device powered up. Nothing happened for a couple of seconds, then the portal erupted in a soundless flare of intense green light that turned the phototropic coating on our ExoSuit canopies a completely opaque black for five seconds. Who needs peril-sensitive sunglasses?

"That was impressive, to say the least." I said shakily. "Since we're working on my assumption that this is a Precursor version of a *chaapa'ai*, and not an elaborate waste-disposal system... I'll go first."

"Is that wise, Captain?" JUNO asked earnestly.

"Not even remotely Lass, but I'm going first anyway. I would'na send anyone where I wasn't willing to go myself. Besides, if something does go wrong, it's best that it only happens to one of us. Wait for my signal, and proceed through the portal one at a time. Await confirmation of a safe arrival before entering. By the bye, here's some ominous thoughts to consider... Hopefully, that ion crystal isn't a one-shot deal, and I won't end up stranded somewhere that's inaccessible from the surface." I sketched a salute with the ExoSuit's right arm. "That's it, troops. I'll see you all on the other side."

I stepped toward the shimmering green energy field. Although it was tempting to reach out and contemplatively touch the field's rippling water-like surface before stepping through, this sort of thing has never struck me as a particularly intelligent move. Seems like a good way of losing one's hand, particularly as this device might have no way of telling if there are supposed to be any other bits attached. I'll treat this as a practical exercise in temporal-spatial engineering, thanks very much.

"Selkirk here. Teleport successful." I'm in another cavern, although this one looks rather familiar. Sure enough, there are fresh ExoSuit footprints in the sandy soil that surrounds the portal platform. Positional data obtained from three nearby nav beacons confirms my new location as *Pyramid Rock*, and this is obviously the upper cavern that we found earlier. Apart from this portal, there's nothing much to see in here. The really interesting stuff is in the Precursor gun platform below.

"I wound up on *Pyramid Rock*. How's the portal holding up on your end, JUNO?"

"It's still operating, Sir. Energy readings are stable. Awaiting your clearance to proceed." JUNO said.

"Hang on a sec. I'll see whether it's possible to return using the same portal. Stand by."

Apparently so. After a subjective transit time of 15 seconds, I found myself back on *Kaori-san no-shima*. There is definitely something very odd happening here, as the actual elapsed time between entering and exiting the portal amounted to a mere handful of picoseconds. As near as dammit to an instantaneous transfer time, in fact. My internal chronometer says otherwise. It's not a huge discrepancy in time, but just enough to irritate the finely-tuned sensibilities of an engineer. I'm guessing that there's some temporal jiggery-pokery going on at the quantum level, although I'll need to gather more data before I can figure out exactly what's going on. For what it's worth, I shared these observations with the crew.

Apart from that weird time-dilation effect, the Precursor teleport system seems straightforward enough. Its operating principles are roughly the same as those applied to a phase gate, with the sensible exception that users don't have to be travelling at light-speed to pass through it. I'd call that a major kindness. Although it's theoretically possible to teleport at 'walking pace', it can only be done if absolutely stable points of reference have been established between transmission and receiving stations. Since space-based phase gates are constantly in motion, they naturally abide by a far more complex set of physical rules. The principle of 'absolute positioning' might explain how *Kaori-san no-shima* was able to stay in place during the cyclone. All that's needed is some sort of gravity anchor... And a huge amount of power.

Jackpot. After travelling through the second teleport inside *Pyramid Rock*'s gun emplacement, we found ourselves figuratively transported to Hell's waiting-room. Actually, it's a Precursor geothermal power station, albeit one rendered on a scale that beggars human imagination. Rather than sink a deep borehole and draw power from it using liquid heat exchangers, the Precursors went straight to the point and suspended this facility directly above an active lava vent. Our scans have determined that this power plant exploits the Seebeck Thermoelectric Effect to a phenomenal degree, generating electrical current from heat applied to the junction of two dissimilar conductive metals. Rather than containing devices we'd recognise as generators, this entire facility is a generator in itself. As always, the exact composition of those Precursor alloys defies any detailed analysis, so it's going to be a fair old while before this level of technology finds its way into Terran hands. Still, I'm happy to learn all we can from this place and run with it. Who knows? We might get lucky.

After a thorough analysis of the power plant's staggering inner workings, we discovered an example of Precursor technology that eclipses everything else we've seen so far. And I do mean *Everything*. I'm standing in a doorway that leads directly into the magma chamber surrounding this facility. The only thing separating me from billions of tonnes of *Manannán*'s seawater is a one-molecule thick wall of water. Here's the truly amazing part: I can push my hand straight through it.

The secret is cornflour.

I'm still working on some of the fine details, although I conjure that I now have this marvel of Precursor technology gripped firmly by its short and curlies. This monomolecular layer of water is held in place between two planar probability fields. The fields are synchronised to oscillate between charge states, effectively turning the trapped film of seawater into a non-Newtonian fluid. If a body is moving slowly enough, it will pass through this field without encountering any appreciable resistance. I've already tested this effect by passing my hand through the barrier at different speeds. The sensation is exactly like dipping your hand slowly into a thick solution of cornflour and water. However, if you ran straight at this barrier, there's a fair chance that you'll end up bouncing off it with one hell of a thump. Or you might disintegrate on impact. Reckon I'll give that one a miss. There's a limit as to how far I'll go in order to test this hypothesis.

Simply stated, the slow blade penetrates. A couple of billion tonnes of seawater doesn't stand a snowball's chance in here. There's simply too much potential energy working against this field. The harder the push, the greater the resistance that will be encountered. A truly remarkable example of Clarke's Law.

Further investigation of the power plant revealed a couple of the Precursor key artifacts and a data terminal. JUNO's currently decrypting the downloaded archive material, and there's more than enough technical information to keep all of us profitably occupied for the next half-century or so.

"Where to next, JUNO?" I asked. "Since there's no second teleport station here, we'll have to leg it."

"The Lava Castle, apparently. These files refer to the structure as the 'primary containment facility'."

I snorted in disgust. "Ah, hell. I thought we'd seen the last of that place... Okay, where away?"

JUNO projected a schematic of the magma chamber, indicating a concealed passage leading south.

"Down there, Sir. Distance to facility, approximately two kilometres through an inactive lava zone."

"Well, that sounds like a tonne of fun." I griped. "It's a good thing our suits can take a bit of heat."

We set off in standard patrol formation. Our initial descent from the power plant wasn't what I'd call a pleasant experience, as the churning mass of lava directly below provided an excellent incentive to be careful. If anyone did fall into the lava, we'd have less than ten seconds to rescue them. Héloïse and Enzo performed superbly, rappelling, grappling and free-falling like skilled acrobats as we worked our way down to the passage. As soon as we reached solid ground, I made a point of checking their lifesigns to decide whether or not to abort this mission. Their ExoSuit life support systems will keep their bodies at a sensible temperature, although I'm more concerned about their increasing stress levels at the moment. This is not the safest place for either of them.

To be perfectly blunt, Héloïse and Enzo are showing signs of an incipient case of the jitters, even though they're unwilling to admit it. There's no point to either of them putting a brave face on it, particularly when I can read anyone's physiological state just by looking at them. I called an immediate halt to give them some time to wind down, rather than push on without a thought for their mental states. Even though Héloïse prefers to zip her lip and soldier on, she has to acknowledge her limitations in a situation such as this. I admire her tenacity, but there's no easy way of telling this to a woman who has necked a rampaging Onos with a Thermoblade. Enzo's basically still a kid, so we can't push him too hard. It's best for all concerned to take a breather while we still can. My gut feeling tells me there's more than lava waiting for us ahead.

There's no way that we could ever bring a *Cyclops* down here. Our ExoSuits are coping with the heat well enough, although there's precious little room to manoeuvre in this corridor. Progress has been slowed by a need to travel in single file through some of the tighter sections, staggering our line vertically and horizontally to present a maximum amount of defensive firepower wherever the terrain permitted it. I'm not being paranoid. Everything about this biome whispers 'ambush'.

Since we've never approached the Lava Castle from this direction before, I have absolutely no idea of what to expect further on. It's a wretched, cheerless place, as far removed from sunlight and open skies as no sane person would ever want to be. My depth gauge reads 1,382 metres and *Gawain's* external hull temperature is a toasty 65 degrees Celsius. If it wasn't for the presence of convection currents drawing cooler surface water through this corridor, we'd all be feeling more than a mite uncomfortable about now. As long as we maintain a safe distance from the river of lava winding through this passage, we should be fine. Naturally, the thermal power converters in our suits are making excellent use of this heat, keeping our reserve power cells nicely topped up. It would be the height of stupidity to rely solely on an ExoSuit's internal reactor at this depth, and while a pair of standard power cells probably wouldn't hold quite enough juice to reach the surface, you might be able to pull over somewhere slightly less hostile and drop in some fresh replacements.

Unsurprisingly, there's a remarkable abundance of life down here. Ambient temperatures are even higher than those we've encountered around deep hydrothermal vents, although some creatures have adapted to cope with the extreme heat and scarce nutrient levels. Some browse on the thin biofilm secreted by single-celled organisms growing in the cooler upper reaches of this corridor, while others feed upon the browsers. There are even extremophile versions of familiar shallow-water species such as the Boomerang and Eyeye, and a thermophilic subspecies of the Ghost Ray. Haven't seen a single Rock Puncher in a fair while, although there's ample evidence that they're around here somewhere. The basalt walls are riddled with their tunnels. I suspect that they're keen to keep their distance, particularly after our last encounter. Given a Rock Puncher's outstanding potential for unbridled havoc when they're riled, that's fine by me.

Acoustics indicate a sizeable pack of Lava Lizards ahead. I'd rather not tangle with them at the moment. If we can sneak through their territory without stirring them up, I'd consider that an acceptable outcome. No unnecessary entanglements, if at all possible. We're all in the hazard here. "Silent running. Blacklight rig. Switch to infra-red, passive sonar video overlay." I murmured. Our lights went dead. The lava river had diminished to a mere rivulet, casting its sullen red glare on the lower extremities of our ExoSuits. If our surroundings seemed miserable and foreboding before, they became absolutely infernal once the lights went out. We slip between shadows like fleeting wraiths, moving as silently as our ExoSuits will permit. No sudden movements, each step taken deliberately and placed without rhythm, blending into the muted soundscape of this Stygian place. We communicate with terse written phrases, lest the sound of our voices carry to unfriendly ears.

For a while there, I actually thought we could brazen our way through this area without incident. No such luck. IANTO reported a malfunction in *Galahad's* power management system a couple of minutes ago, and we've withdrawn to a small side chamber to figure out what's wrong. Level Two diagnostics confirm the presence of a slow but steady power drain, but could not pinpoint the source. My first guess is a thermal insulation failure on his suit's main wiring bus. Not good at all.

"Stand fast. I'm going EVA to take a closer look."

I opened *Gawain's* hatch and swam out. Thankfully, the water temperature had dropped significantly as we moved farther away from the lava river. This area is a tolerable 18 degrees Celsius, so I won't have to worry about needing a re-skin after this mission. My polymer skin can handle temperatures up to 220 degrees, then nasty things start happening to the bits underneath. I unclipped the hand scanner from my harness and swam around *Galahad*. Nothing out of the ordinary so far. No loose panels or exposed cables. No obvious signs of physical damage. Nothing for it but to give the ExoSuit a thorough eyeballing; remote scanning doesn't tell me a gorram thing.

I almost missed it. There's something attached to *Galahad's* back, nestled tightly beneath its power cell fairing. It's alive, and it appears to be feeding off the power grid. The creature is slug-like, about 300 millimetres long. Its dull violet skin is segmented into large scales, rather like a trilobite in its appearance. Its head has two stubby horns and tiny orange-rimmed eyes, which I suspect might be vestigial, considering the lousy ambient light levels down here. Can't see its mouth parts properly yet, so I'll attempt to pry it loose with a knife.

Jings! It's like trying to pull a pair of rare-earth magnets apart. I can't risk using a propulsion cannon with all those lava lizards nearby. Its concussion would get their attention in short order. There's nothing for it, my power-hungry little friend. Knife time. *Best make your peace with Father of Tides.*

"Power levels have stabilised, Captain." IANTO said. "As far as I'm able to determine, this organism drains electromagnetic energy from various sources by an induction process, diverting some of the energy to power an organic magnet surrounding an otherwise non-functional oral structure. Similar colouration around its atrophied eyes indicates that the creature uses a highly accurate version of electrosensing, rather than visual input. It's an extremely subtle and efficient parasite, Sir."

"I'll say it's bloody subtle. It doesn't show up on any of our EM sensors at all." I agreed. "Reckon it might emit a damping field of some kind? Something that masks its presence while it's feeding?"

"Insufficient data, Captain. I'll have to dissect one to determine the full capabilities of this species." IANTO replied. "Please place that specimen in a bio-sample container, Sir. I'll examine it later."

I'm simultaneously intrigued and deeply concerned by these wee beasties. One of them constitutes a minor nuisance. A shoal of them could bleed an ExoSuit dry in minutes. I'm unsure how they would affect an android, if at all... Our internal systems are EM-shielded of course, partly for stealth, but mainly because we're specifically designed for space travel. If it wasn't for the Faraday cages embedded in our synthetic skins, one decent solar flare would be quite enough to ruin our day. Permanently.

My brief examination of that 'Lava Larva' suggests that it might be possible to artificially reproduce some of its more remarkable traits. A number of *Manannán's* other life forms have a natural ability to metabolise metals or produce 'bio-alloys' for various survival applications. Tough dermal armour, electrical field generation, self-contained warp fields and so forth. I'm guessing that we can make some serious use of similar abilities once we return to *Terra*.

As a precaution, I checked all of our ExoSuits thoroughly. This has been an unpleasant wake-up call. "Okay troops. Looks like we're all in the clear. Watch your power usage, particularly when we get close to the lava again. One more thing... Check your offsider's suit for those nasty wee buggers. We can't risk having a dead suit when we're this far down."

Now that we know what to watch out for, this mission has acquired a new layer of complexity. Lava Larvae are small enough to pass by unregarded, and their dull coloration blends in perfectly with the tortured basalt formations found in this biome. Every crevice, cave or jumble of boulders is a potential hiding place for these little horrors, so we found ourselves walking an increasingly narrow tightrope between them and the Lava Lizards. So far, we have managed to avoid drawing their attention, although I suspect that we'll have to cross their path at some point. The passage has opened out appreciably over the last hundred metres, and it leads into a large chamber that offers almost no cover. The cavern floor is crisscrossed with wide lava streams and pools, dotted with a sparse scattering of tiny islets that rise only a metre or two above a seething expanse of lava.

"Nothing for it. We'll have to run the gauntlet." I said. "Set for neutral buoyancy cruise mode and stay low. With any luck, the lava's glare should mask our presence."

We set off in staggered single-file formation, using the islets as waypoints. Each time we touched down, there was a brief halt as we dusted off any Lava Larvae that had attached themselves to our ExoSuits during the crossing. It went smoothly for a short while, although the infestations became increasingly frequent as we neared the centre of the cavern. It quickly dawned on me that our humane 'catch and release' strategy wasn't working at all, and a more permanent solution to the Lava Larva problem had to be found.

Halfway to the next waypoint, everything went straight to hell. A shoal of Lava Larvae swarmed us, their numbers considerably swollen by those we had removed earlier. As an aside, it's worth mentioning that I have never seriously considered fabricating a knife suitable for use in an ExoSuit's manipulators, or fitting bayonets to our Gauss cannons. At the time, it seemed like attaching a spear to the nosecone of a cruise missile. A patently absurd notion, but one that would have saved us no end of trouble farther down the track. This is the precise point in time where that casual oversight came home to roost.

This is rapidly developing into a desperate situation. Even though our suit thermal converters are receiving a fair whack of energy, they can't keep up with the drain rate. Any suit with more than five larvae attached is fighting a losing battle. No doubt about it. As soon as the reserve cells are depleted, the larvae will be feeding directly from the reactor output of each suit. Worse still, they are truly voracious feeders. As soon as one gorges its fill, it drops off and the recently vacated feeding site is quickly occupied by another. At first, we tried catching and crushing them with our suit manipulators, although this merely accelerated the energy drain rate. Apart from being time consuming and ultimately pointless, this tactic has other serious drawbacks. The body fluids of Larva Larvae are a highly corrosive electrolyte solution, and it's starting to damage our suits. Furthermore, our wee scuffle has attracted the attention of a pack of Lava Lizards. Just what we needed. Thanks.

They circled us warily at first, unsure of what to make of our ExoSuits. Easy meat or a threat? We deployed in a defensive circle on the tiny rock outcrop, each one of us standing only a few metres away from the slowly heaving lake of lava. As last stands go, I feel that we've unwittingly selected a truly epic location. However, any heroic end worthy of saga and song requires at least one witness, and I notice that spectators are in short supply down here. Oh aye, we're history either way. Let's do this.

The Lava Lizards are becoming bolder. One of them darts in, jinking and weaving to avoid our wall of repulsion cannon fire, while its mates attempt a flanking attack. Classic pack hunting behaviour. We're holding them back for the moment, although we can't do this forever. There's a finite limit to how much damage an ExoSuit can sustain before it gives up the ghost. It's all feints and posturing right now, their snapping jaws and glancing claw strikes can't do much damage in a single hit, but their effect is cumulative. Occasionally, one of the creatures breaks through our firing pattern and gets in among us, making them almost impossible to attack. One stray blast would be enough to send an ExoSuit reeling into the lava, or cause its cockpit canopy to implode. I'd like to avoid that.

Stasis fields worked for a while, but the Lava Lizards caught on in fairly short order. It only took them a couple of failed attempts to figure out what was happening, and then they kept their distance accordingly. Worse still, the field seems to attract Lava Larvae like a dinner-bell. We're having to divide our efforts between dispatching those nasty Joule-sucking grubs and fending off Lava Lizards in the meantime, and that strikes me as a definite no-win situation. In effect, we have blundered into a Mexican standoff, and there isn't a gorram thing any of us can do about it.

"Got one!" Héloise whooped. "Smashed it straight into the lava!"

Sure enough, there's a slightly darker patch about forty metres out. That's one less to deal with. We might be able to win this one after all. Suddenly, something surged out of the lava, heading straight for Héloise. I swivelled *Gawain's* torso, bringing both repulsion cannons to bear on the object. The suit's targeting system flashed up 'Organic: Lava Lizard'. *What the hell?*

"Héloise! Look out!" I yelled, opening fire. The graviton pulses hit, hurling the creature sideways. Instead of hanging limply, stunned by the concussion, the Lava Lizard cart-wheeled through the water, its limbs flailing wildly. By all rights, that shot should have knocked the stuffing out of it.

This one is all too obviously *compos mentis*, and from what I can gather, it's extremely pissed off. With a shrieking roar, it dived straight into the inferno below and almost instantly, emerged sheathed in a shell of rapidly cooling lava. No wonder it survived after Héloise shot it down. Extreme heat tolerance, and then some. Maybe IANTO has some ideas how...

"BLOODY HELL!"

I barely had time to register the lava projectiles it spat at me, deflecting them at the very last second. The Lava Lizard shrieked again, a curiously clipped sound, unlike any vocalization I've heard so far. Some sort of command? To my horror, the others reacted instantly, diving into the lava and emerging clad in similar shells of basalt armour. The entire pack charged at us from all sides, spitting balls of partially-cooled lava as they came. They now have body armour and projectile weapons.

Yes, it *was* an insanely bad idea to come down here. Thanks for reminding me, Captain Obvious. After fifteen minutes of sheer pandemonium, the Lava Lizards backed off and resumed circling us. We got lucky with a couple that we were able to trap in our graviton beams. These careless ones were quickly slammed into the deck at point-blank range. I'm pleased to say they won't be bothering us anymore. However, we aren't entirely unscathed. DIGBY's suit *Percival* caught a couple of solid hits. Lava fragments have seized up its left leg and hip actuators, and we're in no position to repair the damage. The water temperature around this rock is 437 Celsius, and that's enough to turn any one of us into a crispy critter. JUNO says it will be an hour before *Taranis* and *Aegis* can

reach us for fire support and a very hot extraction. We're rapidly running out of options here, and I'm beginning to suspect that we've finally bitten off more than we can comfortably chew.

I'm starting to hate Lava Lizards with a rare passion. They're eminently capable opponents, perfectly suited to this hellish biome. Tough skinned even without their stone armour, and they're extremely agile swimmers. Damn cunning hunters, too. They appear to be analysing our every move, waiting to exploit any momentary flaw in our defences. Give me the pitiless brutality of the Kharaa anytime.

At least they can be killed entirely without compunction, and in that observation, there's the rub. The very heart of our problem here. We can't simply slaughter everything that stands in our way, although our assailants are doing their level best to make me regret that decision. All they have to do is keep wearing us down, and they're doing a mighty fine job of it so far. Their last sortie dealt some serious damage to *Guinevere* and *Morrigan*, which means we're down to three ExoSuits still capable of operating at full capacity.

"Warning. Energy cell depletion is now at critical level. Warning. Parasite activity detected."

Gorram it. That's another thing. The harder we try to fend off the Lava Lizards, the more interesting we become to the Lava Larvae. We're being double-teamed here, and it probably won't end well.

I picked off a browsing Lava Larva with a graviton snare, punting it spitefully at a circling Lava Lizard.

"Hope ye choke on it, ye dirty scunner." I muttered sourly.

The larva smacked into the Lava Lizard's armoured flank, exploding in a small cloud of blood. Hardly a telling blow, but one that triggered an unexpected response. The creature suddenly twisted, wheeled about in its own length and began snapping excitedly at drifting particles of Lava Larva. *Hmm... Interesting.*

I activated comms. "Change of plan, troops. We're gonna make a tactical withdrawal. Forwards."

Naturally, this statement raised some concerns among the crew. After a hasty explanation of my idea, we formed up back to back in two ranks of three, with our damaged suits at the rear. *Centurion*, *Gawain* and *Lancelot* were set to be the vanguard of this daring retreat, our rearguard serving as ammunition feeders. It's a hare-brained scheme, but it might just work. Fingers crossed.

"Everyone ready to go? Snare yeselves a grub and let fly!"

Our first salvo got their attention, all right. I'd been labouring under an impression that the Lava Lizards have a personal beef with us. Not so. Turns out they were far more interested in the Lava Larvae that we've been attracting, and they saw us as potential rivals for their preferred food source. Might as well wear a live Peeper bikini and go swimming with Stalkers. Same thing, apparently.

Only another 220 metres to go. As far as we know, all of our suits are now grub-free. Power levels are building up slowly once more, and our plucky wee band now has a ravenous pack of Lava Lizards in tow. In fact, I feel slightly ridiculous at the moment. Instead of making our Heroic Last Stand, we've come down to a bunch of zoo keepers feeding stropky sea-lions at an aquarium. I'll bet they don't use propulsion cannons at SeaWorld, although Terran seals don't spit lava, so it all evens out in the end. Some might see this as an anticlimax, but it beats the alternative ending by a long chalk.

Eventually, we found ourselves alone again. As soon as the Lava Lizards realised that no more free food was coming their way, they deserted us without even bothering to look back. Fickle buggers. This part of the corridor is much cooler, so we were able to repair our damaged suits and remotely survey the terrain in the huge cavern ahead. No more nasty surprises today. Here be dragons.

CHAPTER THIRTEEN

Three broad rivers of lava flow around this tiny outcrop of rock, falling slowly into the depths below. I've named this natural feature '*Falls of Phlegethon*', with a definite tip of the hat to Dante Alighieri. It's a scene straight out of *The Divine Comedy*, save that there's no legions of Hell or souls of the damned to contend with down here. Instead of the infernal City of Dis, the brooding ebony spires of the Lava Castle rise abruptly from the centre of an immense lava lake that formed a hundred or so metres below the Falls. I've never held to any notion that there's a Heaven and Hell, although this awe-inspiring vista is a fair replica of what it takes to keep some folks on the straight and narrow. Having blundered through The Veil on several occasions, I assure you that there's nothing like this waiting for you on the other side. Absolutely nothing, in fact. Once through that final door, sinners and saints are served alike in equal measure, and this strikes me as a reasonable conclusion to one's life. It would take some mighty persuasive speech from any Shepherd to convince me otherwise.

Same tactics as before. There's an abundance of Lava Lizards and Lava Larvae in this area, so we're going to play one species against another once more. As we made repairs earlier, IANTO suggested recalibrating our ExoSuit EM sensors to detect tiny 'dead zones' moving around in the overwhelming thermal background noise of the lava zones, allowing us to intercept and repel any approaching Lava Larvae before they could work any mischief. With the Lava Lizards thus occupied, our transit of the area proceeded more or less uneventfully. Running point 20 metres ahead of the main formation, *Guinevere* suddenly extended its right arm overhead, silently signalling an immediate halt.

"Captain, acoustic transient detected ahead. Dragon Leviathan, subject coded as *Nánfēng*." JUNO said. "Range, three hundred metres. Its motion pattern remains unchanged. Your orders, Sir?"

"If she's down here, *Father of Tides* probably won't be too far away." I mused. "Likewise, her sisters will also be somewhere close by. Mind now, these Dragons might not take kindly to us turning up here uninvited, so we'll have to be on our very best behaviour. A stealthy retreat may be required."

I'm seriously considering pulling the plug on this safari. Dragon Leviathans are touchy at the best of times, and I suspect that *Nánfēng* would become openly aggressive to our presence, particularly without the moderating influence of *Father of Tides* at hand. Rather than presume on any slim acquaintance that we might share, we'll have to give this area a wide berth and avoid approaching the Lava Castle, at least from this side. We should be able to slip past *Nánfēng* and make our exit through the eastern ILZ corridor unchallenged, but that's basically all she wrote for this expedition. Not a great deal to show for our efforts so far, either. A bitterly disappointing outcome.

Nánfēng certainly knows we're here. She's following our every move now. Her message is clear. *Come no closer*. At least we've finally found where *Father of Tides* takes his ease, although this discovery is entirely unintentional. We'll slip away discreetly, although I'm not entirely certain how one does this without looking suspicious. As soon as we have a firm nav solution for the entrance to the eastern ILZ corridor, we are most definitely leaving.

A sudden energy spike on the HUD overlay. There's a vortex forming 10 metres ahead. Warper.

The creature materialised abruptly, barring our way. "*Lost Ones not come (to) This Place.*" It signed emphatically. "*Father of Tides break Lost Ones shell. All die. Go now.*"

Out of the corner of my eye, I saw *Morrigan* shift its stance minutely. *Centurion* tensed ominously.

"Héloise, Enzo... Stand down." I murmured. "That's nae a statement of fact. A warning, is all."

Gawain stepped forward, its holo-emitters flaring into life. My Warper avatar materialised, its outline rippling in the thermal convection currents swirling in the water around us.

"*Warm seas, friend. These ones mean no harm.*" My hologram gestured.

My response seemed to confuse the Warper momentarily. The colouring of its mantle strobed for a few seconds, an obvious sign of its uncertainty. Its talons lowered, then waved in respectful reply.

"*You are Father of Shells.*" It signed gracefully. "*Forgive. This one not know.*"

"*Lost Ones swim with Father of Tides. Father of Shells swims with Father of Tides.*"

"*This is known now. Forgive. This one is made new. Still things to know.*" The Warper admitted.

Ah. We're dealing with a new recruit. Having never seen the like of us before, it probably had to check our credentials with the Orderly Room, or something like that. Simplest explanation, no-one Upstairs forwarded the memo regarding our status as trusted allies. However, I'd have to say it's more a case of this Warper encountering a pair of increasingly spooked human minds and reacting accordingly. Warkers can't read androids, although this doesn't seem to be an issue for them. As long as our actions precisely reflect what we say to them, we give the Warkers no cause to distrust our psychically opaque minds.

Conversely, the average human psyche has all manner of disturbing stuff lurking in the subconscious mind, making it difficult for Readers to reconcile any face-to-face communication with the turmoil of suppressed emotions just beyond the grasp of rational thought. Héloise and Enzo must have been broadcasting their collective fears at full power without realising it. Given our current circumstances, I blame neither of them. No human mind could pass though this nightmare realm entirely unscathed. With any luck, we'll be treading on far safer ground from here onward.

Under the watchful eyes of the Dragon Leviathan *Nánfēng*, we approached the shattered rear wall of the Lava Castle. A lifetime ago, I watched this same wall crumble away under the onslaught of massed Rock Punchers summoned by *Father of Tides*. Apparently, we have also been summoned.

As we entered the Sea Emperor's former prison, I was immediately struck by how radically this area has changed since our last fateful visit. The chamber's lava floor had solidified sometime over the last century, its fires no longer sustained by constant upwelling of magma. The baleful red glare that illuminated the Emperor's personal Tartarus is long gone, replaced with a vibrant, peaceful environment full of light and colour more befitting that remarkable creature. I can only guess how this change was brought about, although I'm certain that his Warkers figured prominently in its creation. There are Bonesharks and Stalkers here, along with many food species normally found in shallow biomes. Remarkably, these predators have shown no interest in us, almost as if their instincts have been subdued by the presence of *Father of Tides*. An undersea garden of Eden.

"Warm seas, Father of Tides." I signed respectfully. "It feeds These Ones to see you again."

"Warm seas, Father of Shells. You swim far. No Enemy here. All burn." The Emperor gestured.

"These ones come This Place for more knowing of Old Ones. We make sky-shell strong, we leave."

"This is good. Old Ones strong in knowing. Old Ones words weak in truth. Old Ones all die."

If I've interpreted this correctly, it sounds like yet another case of terminal hubris. Nothing changes. While conversing with *Father of Tides*, I realised that his gestures seemed noticeably slower and significantly less fluid than usual. Rather than skip lightly around the question foremost in my mind, I addressed my concerns as bluntly as possible. His shockingly blunt reply nearly floored me.

"Sick? No." *Father of Tides* signed, his slow-moving forelimbs seemed to whisper. "This One is ending. Many, many tides This One has swam. This One die soon."

"These Ones help Father of Tides? Make healing life-stuff for Father of Tides?"

"No. Too many tides too long gone. This One will die. New life sleeps in This Place." *Father of Tides* replied calmly, indicating a Precursor structure below us. I see a low platform attached to some sort of mechanism. The platform carried five Sea Emperor eggs; all dormant, but apparently still viable.

"Old Ones not have knowing to wake these ones. Lost Ones from beyond-sky not wake these ones. You must wake them. This One cannot. Too many tides are gone."

Hell. We've grown extremely fond of *Father of Tides* over the years. Alien behemoth or no, this news hit us all like a solid punch to the guts. Héloïse is openly sobbing her heart out. If I had the appropriate equipment installed, I would certainly be joining her. I can still experience grief, but find myself unable to express it. There's only a hollow, aching void where my real feelings used to be.

Our grief is of little concern to *Father of Tides*. A closer examination of the Precursor machine has confirmed that it's an incubator of some kind. Like many Precursor devices, it's equipped with a standard ion power crystal receptacle. Powering it up poses no problem, although we're running a bit low on the wherewithal. Presumably, there might be more crystals to be found deeper inside this complex, but I'm reluctant to squander the couple we have left. I have no qualms about using one on this device, although it appears to need something more than a simple jolt of energy in order to function. A cylindrical flask is attached to the operating console, and I'm assuming that a chemical component is also required. Unfortunately, accessing the Precursor data terminal sheds no further light on the Sea Emperor incubation process, or exactly what chemical compounds are involved.

"New life sleeps. Life-stuff from This One gone. You make, Father of Shells. This One show. Look."

We watched in amazement as *Father of Tides* reached out with his mind, summoning various creatures into his presence. Each one arrived carrying a single fragment of plant material, unerringly homed in on the incubator platform, dropped its offering and swam away. When a lone Crabsquid entered the chamber, my internal HUD targeting system reflexively acquired it, at least until I noticed that it also carried a frond of deep-water growth. It dropped the plant matter onto the platform without even glancing in my direction, and then slowly swam away.

Father of Tides descended slowly, his immense form coming to rest barely two metres away from *Gawain*. I exited the ExoSuit cockpit, swimming over to him so that we can converse face to face. One last time. It seems most befitting to do him this courtesy of honour while he still draws breath.

"You have many knowings, Father of Shells. You have knowing to make bad waters clean, yes?"

"Yes. *This One* can." I admitted. "*Waters of First Home* above-sky gone bad. Nothing swims."
"You take many life from *This Place*. Make waters of *First Home* clean. Make new seeds of life."

At this point, you might be wondering precisely what species of plant those creatures were carrying. I can only tell you this... Keep wondering. There are some secrets that can never be revealed. Fabricating the hatching enzymes proved to be a fairly long-winded process. However, we are adequately prepared for almost every possible contingency that might arise during this mission. Our ExoSuits routinely carry sufficient raw materials and components to construct a temporary shelter base, and this wee bit of foresight has finally paid off. One multi-purpose room, a thermal power plant and a Fabricator later, I was able to produce a canister of enzymes on site. We're not ideally placed to bring in a *Cyclops* to use its onboard facilities, and I'll be damned if I have to slog all the way back to *The Broch*. More to the point, *Father of Tides* is rapidly running out of time.

"Good. Now you make *Old One* far-swim thing live." *Father of Tides* gestured toward an inactive Precursor portal, almost entirely buried under a small mountain of sand. I groaned inwardly. That will take hours to clear, although we might be able to speed up the job by using our suit thrusters. Just as I was about to swim down and size up this daunting task, *Father of Tides* swung his ponderous head around and exhaled a powerful jet of water at the mound, completely scouring the portal platform clear in a matter of seconds. An elegant solution. An engineer's solution.

I wasted no time installing the ion power crystal. The portal flared, and I was pulled forward by a sudden inward surge as the water pressure equalised between both spatial connection points. Its exit is somewhere relatively shallow, judging by the strength and duration of that surge. I'd like to jump through and take a quick gander where this portal leads, but that side-trip is best left for later. "*New life swim free. Too far, too many talon hungry for new life. Far-swim thing keep them safe.*"
The way is now clear for *Manannán*'s new Emperors. It's time for me to play my part as midwife.

The incubator accepted the enzyme canister's contents immediately. A holographic display flickered into life above the console, providing real-time data on each of the embryos as they stirred from centuries of dormancy. As this final gestation phase is an entirely automatic process, there's nothing else for me to do but wait and absorb a dizzying torrent of information. As it's safe enough in this chamber for Héloise and Enzo to leave their ExoSuits, everyone has gathered on the incubation platform to welcome the newborns. It's a cold, hard 'Verse out there, and god-parents are a solid shoulder to lean on when the journey turns hard. Guess we'll do, at a pinch.

As the egg casings began to split, IANTO warned us to move well away from them. Fair comment. There's a possibility that the baby Emperors might accidentally 'imprint' on us, rather than *Father of Tides*. He should be the first thing they see, not us. Our new vantage point twenty metres away provided an excellent view of the platform, and effectively concealed us from the infant Emperors. A few minutes later, all of the Emperors had struggled free of their egg cases. Each one experienced a brief moment of disorientation before swimming over to *Father of Tides*, so it turns out that IANTO was right on the money with his timely warning. Fine, strapping lads all, five metres in length. The infants clustered around *Father of Tides*' face, their forelimbs and tentacles waving in silent communion. This touching scene only lasted a moment or two, then they all turned and headed straight for the portal. As the last one disappeared, we swam over to where *Father of Tides* lay. The

gentle thunder of his respiration fading with each passing breath. He gestured slowly as we approached. *"New life swims free. All is good. Father of Shells words swim true. New life takes my knowing. This One ends now. You go to place above now, take only knowings of Old Ones. Leave talons of Old Ones in This Place."* His face suddenly loomed closer. An unmistakable warning. *"Take only knowing of things, Father of Shells. Not take Old One talons. All will die."*

Father of Tides passed away soon after those final words, peacefully surrendering himself to the way of all things. We floated in silent vigil before his dimming eyes, lest this noble Titan die alone and his final moments pass entirely unmarked by an otherwise indifferent Universe.

A good death.

Whatever thoughts the others may have dwelt upon in his final moments, none seemed willing to share. For my part, the sadness that I feel will be impassively analysed, error-checked and filed away for future reference. There is nothing more to be done with it. I feel strangely helpless and incomplete. Aware of the pain, yet unable to speak of it plainly. Grief is the phantom ache of a long-gone amputated limb.

At this precise moment, I realised that I have become a half-finished, mechanical parody of humanity. Lip-service has been paid to all outward displays of emotional expression, but I need far more than this shining body can offer. I desperately feel a need to cry again. Now, more than ever. All I ask is a pure, primal reflex-arc of sorrow or joy. Cold algorithms and precision capillary tubing will not be enough. I have no need of further camouflage. I still consider myself human, and I want... No. *Need* to remain as such, in spite of the elegant mechanisms that manifest this increasingly vague imitation of life. When all is said and done, we are but ghosts in the shell.

Before our departure, I swam over to *Father of Tides* and gently laid a hand on his rugged forehead. In life, I would never dare show such impertinence, although it seemed a fitting gesture at this time. *"Your watch is over, Father of Tides. Go below and rest easy. Warm seas, old friend."* I murmured.

We ascended in silence. Above us, an immense viewing platform hung suspended over the Sea Emperor's former prison. Beyond this structure, there is an equally immense moon pool. The Precursors must have observed their captive from this platform, somehow subduing his enormous body and winching it into the moon pool for closer study in a more confined space. As these pieces of information clicked together, I realised that Precursors may have shared at least one of humanity's defining traits other than insatiable curiosity. Cruelty appears to be a Universal constant.

Our ExoSuits jetted out of the water, landing on an elevated platform overlooking the moon pool. No apparent instrumentation or mechanisms anywhere in here, so it's a fair assumption that this part of the facility was designed purely for visual observation. I'm not sure how I would have reacted to the presence of any obvious surgical equipment in here, although its absence made me revise my estimation of Precursors slightly. If they were inclined to dabble in vivisection here, that would have torn it for me. The way I'm feeling right now, I would erase this place in a heartbeat. Still, it's best that we search the entire complex before I pronounce judgement on an extinct race.

A short corridor lay beyond the moon pool's sole doorway. As we advanced, concealed lighting panels lit up as we entered their detection field, illuminating the way ahead with their familiar green glow. As we stepped into the vast space beyond, Héloïse gasped at the overwhelming immensity before her eyes. Without the slightest word of exaggeration, the sight we beheld was sufficiently impressive to stop everyone dead in their tracks. This place was fashioned on a truly Olympian scale. To give you a better idea of what we're looking at right now, one of the lesser Pyramids would fit quite comfortably inside this gigantic room... As a rather ostentatious designer accent piece. Ironically, we can't tell another living soul about this discovery. Humanity must never know it exists. Pandora's Box is real. We're currently standing inside it.

From the look of it, this open space also served the Precursors as a museum of sorts. However, there is something infinitely more enticing in here. Ion power crystals. An immense mechanism dominated the centre of this octagonal chamber, and at its heart lay a large neon-green crystalline matrix, pulsing with stored power. Just a few spare chunks would make this trip worthwhile. Every once in a while, one of the Precursor drones skittered up to the pedestal and carved off a cube with its particle-beam cutter, then scurried away with its cargo. Eventually, the crystal was completely mined out, and the device cycled to fabricate another chunk in its place. Rather than swoop in and grab as much as possible before one of the drones reacted to our presence, I observed this procedure until a regular pattern could be determined. Probably not the best idea to antagonise those drones unnecessarily. Their cutter beams can do a fair bit of damage, and I'd rather not activate any hidden security systems that this place might have. Patience, laddie. Wait and observe.

"There's a five-minute interval between each drone's shift. Just enough time for each of us to mine two cubes and have the system replicate a new crystal core." I said. "Stand ready to move in."

Our snatch-and-bolt operation proceeded smoothly. As soon as the worker drone clattered out of sight, we moved in quickly and harvested the ion crystals. The replication process dutifully cycled about halfway through our retreat, but we were already well in the clear. As long as we are nowhere near their work site when they return, the drones will probably continue to ignore us.

"Captain, are you sure only twelve cubes is enough?" Enzo asked. "I've still got plenty of spare cargo space in my suit. I could go back and mine some more, if you want."

"Nay, lad." I grinned. "It's plain you've never heard the yarn of the Golden Goose. We've got more than enough for our purposes. Some will be of immediate use in here, but more importantly, we'll have a few spares to tinker with. I aim to figure out the go of them, with an eye to making more."

Next, we turned our attention to the first row of display cases. Two rows of six Precursor stasis boxes lined the room, flanking the facility's ion crystal fabricator. A fond memory of school excursions surfaces, undoubtedly triggered by the cavernous space surrounding us. Time for Teacher's Speech.

"Before we start, I want to make one thing perfectly clear... Touch *nothing*. If there's anything in here that warranted a final warning from *Father of Tides*, there's probably a good reason why. Furthermore, as far as humanity is concerned, this facility does not exist. All mission data beyond this point is to be partitioned under MAXSEC protocol, *Borealis* command crew eyes only. Base point for recursive event data encryption, the Lava Corridor entrance." I took a deep breath, already dreading what we might find in here. "All personnel, execute MAXSEC protocol."

The display cases are made of an unknown transparent material. Spectroscopic analysis reveals that this substance has metallic properties, although its optical clarity far surpasses anything that we can currently manufacture. Transparent aluminium doesn't even come close to it. One thing is certain, the Precursors took considerable pains to prevent any further access to these items. These items have been physically encapsulated, locked away for eternity. Reliquaries of forbidden knowledge; fully visible, but eternally inaccessible. Somewhere in here, we may even find the secret that toppled the Precursors from their lofty perch.

It's an eclectic selection in here. There is no common theme that binds these disparate elements together. Some items are entirely functional and comfortably mundane in their uses, others are strikingly beautiful for their artistic simplicity. The remainder were shaped to a far darker purpose. The Precursors turned their ploughshares into swords.

"This seems like a good spot." I said. "Héloise and Enzo, you might as well take a breather while we set up our field lab. By the look of it, it's going to take us a fair while to figure these gadgets out." We dismounted, then began unloading equipment crates and supplies from our ExoSuit cargo pods. As an aside, Héloise and Enzo have been on the bounce for nearly sixteen hours now, and they're definitely starting to look a bit blurry around the edges. Nothing that a hearty feed and a decent rest wouldn't fix. While they ate, DIGBY and I set up a pair of Spacer's swags; compact survival shelters that we'd brought along with this particular situation in mind. They're a marvellous piece of kit, although most of their gee-whiz features won't be required here. No excessive levels of heat, cold, atmospheric toxins or radioactivity worth mentioning hereabouts, although a comfortable gel-foam mattress and a 'smart' sleeping bag would be a welcome sight for weary eyes anywhere.

One thing is absolutely certain. These display cases are sealed tighter than a fish's arse. The objects they contain might as well be embedded in a zirconium-lattice resin. For a start, you can forget about using a laser cutter. I've already tried it on the empty case, and the beam passed straight through that clear material without the slightest impediment. Purely for analytical purposes, you understand. I was hoping to obtain some specimens to test the physical properties of this material, but that plan has gone straight down the drain. A diamond drill doesn't even scratch the transparent casing. Shattered three bits without leaving a mark. Curiously, our hand-scanners are able to read the internal structure of every item and provide a basic analysis of its overall function, although certain critical design aspects have been deliberately obscured, literally 'pixellating' our data displays to conceal the functions of those components. Can't even guess how the Precursors achieved that.

From what we've seen so far, maybe it's all for the best. The first device that I examined is a portable radioactive source, specifically designed to disintegrate all forms of organic matter. The sort of thing you might use to completely decontaminate an enclosed space, with an eye to using it later. Once activated, that small, innocent-looking cube emits an intense burst of neutron radiation, then shuts down automatically. Its effects are apparently instantaneous, non-persistent and extremely localised. Since the device doesn't contain any known isotopic material, it probably generates that surge of radioactivity in much the same manner as an old x-ray tube. Think of this gizmo as the ultimate in pest control technology. Horrific though it may be, this device is relatively benign when it's compared with nearly everything else in here.

Take the thermostellar bomb, for instance. Fortunately, this one turned out to be a dud.

However, it's still very much alive and raring to go. I discovered this fact as I neared its display case. Like the radiation device, this small, rounded cuboid looked harmless enough, at least until it sprang into life on my approach. Gave me one hell of a spook. Turns out there's a minor but critical flaw in its detonation mechanism. Assuming that I could open its display case, I know better than to start tinkering with an actual doomsday device. Oh yes, indeed. When this fun-sized package of boom detonates, most of the *Alpha Hydrae* solar system will cease to exist. After completing a hasty (but thorough) examination of this alarmingly twitchy device, a profound calm descended upon me. Apart from not machining that fortuitous sticking-point smooth, the demented genius who designed this dingus also forgot to endow it with the power of speech. I'm extremely grateful for that small mercy. I'm no expert, but there's something utterly *wrong* about a sentient thermostellar bomb. Naturally, any talk of phenomenology is *verboden*. Keep it light. Chat about the weather instead.

"I want that one." Héloise demanded playfully, pointing at the alien assault rifle.

"You probably wouldn't, Dear Heart. As far as I can tell, it's an intrinsic field disruptor."

"Let me guess... That's a bad thing, right?" Héloise smirked. "That's one *horosho* fancy blazer, mate."

"Aye, but yon blazer's a right wicked tool. You aim that beast at someone, and they're gone. *Boom*. A bonny wee mushroom cloud marks their passing. It disrupts the forces that hold matter together. Not much chance of scoring a minor flesh wound with this one. Strictly for outdoor use only."

"Oh. I see." Héloise conceded at last. "Isn't there anything useful in here?"

I sighed wearily, an open admission of defeat. "No. That ancient Mongol sword is probably the only weapon in here that isn't entirely user-hostile. Look, that 'empty' case over yonder contains a swarm of killer nanites. Unbelievably tiny robotic assassins, controlled by only four core commands: Consume. Replicate. Evolve. Conquer. Someone thought it was a good idea to turn them loose. Unless they were equipped with some sort of friend or foe recognition system, they would mindlessly consume everything in their path. I'm hoping that the Precursors were intelligent enough to realise that. I'll bet those nanites evolved beyond the reach of Precursor control. Just a guess."

Héloise frowned. "I'm not buying that idea, dear Captain. There's no evidence that Precursors were fighting the Kharaa on this planet. Where are the signs of war? Where are your tiny killer robots?"

"You've got me there, Lass." I admitted. "There would be traces left, surely. I cannae account for it."

No further knowledge can be gained by endlessly poring over these exhibits, although the building itself still has significant discoveries to offer. In a way, I feel immensely relieved. Those horrific weapons won't be finding their way into human hands after all, leastways anytime in the immediate future. There's always a possibility that someone will discover their operating principles eventually, but they're well out of humanity's reach for the next couple of millennia or so. That's good enough to soothe my conscience.

After packing up our research equipment, we split into pairs and began exploring the Lava Castle's side chambers. Héloise and I discovered a sophisticated water-processing plant, obviously intended to supply filtered, cooled and oxygenated seawater to the Sea Emperor containment facility below. A huge transparent inlet conduit spiralled around a central support column. I estimated the system's flow rate at roughly two megalitres per minute, a figure derived by timing the speed of Peepers as they whooshed through the pipework. Oddly enough, Peepers are also present in the discharge

pipe, apparently no worse for their wild ride. On closer examination, I discovered that the Peepers in the discharge pipe have been coated in Enzyme 42 or its natural analogue, and that this elaborate filtration system now serves to distribute a vaccine against the Kharaa pathogen. The Peeper is an ideal delivery system, since it's the preferred prey of most of *Manannán's* predatory species, man included. I'm fairly certain that the Precursors originally had this in mind, even though they were ultimately unable to procure the enzyme from its natural source, the Sea Emperor Leviathan.

Impressive though that treatment plant is, there wasn't much else of interest to be found in there. We chose another doorway entirely at random, walking into a sizeable room full of display cases. Each stasis case held an egg from every sea creature found on Manannán, including one Leviathan-class specimen that I have never seen before. Considering that this pearly, almost opalescent egg case is about the same size as a Sea Emperor's, that's a reasonable cause for concern. We ambled through the egg display, and then headed back to the atrium. As we neared the next doorway, JUNO and DIGBY emerged from the corridor, their expressions grimmer than winter on Pluto.

"Captain... Don't." JUNO murmured.

"I won't." I said flatly. "It's their vivisection lab, right? I knew it had to be somewhere in here."

JUNO nodded silently, confirming my suspicion. On one hand, I damned the Precursors for their monumental arrogance, although this seems like a particularly empty gesture. In truth, the Precursors had their backs against the wall, clutching desperately at any technology that would aid them in their struggle against the Kharaa. They were a race fully prepared to destroy their solar system or deploy horrific hand weapons to burn out that deadly infection. Tearing unborn Sea Emperors from their cocoons must have seemed a small moral price to pay at the time. Ironically, the Precursors were on the right track. Emperor Leviathans produce Enzyme 42 naturally, although this process requires a specific set of conditions to be met. In their frantic haste to find an effective solution, the Precursors failed to discover this crucial piece of information.

I can't condone the atrocities committed in here. I can't condemn the Precursors for their actions, either. My hands are also covered in blood. People have died as a direct result of me 'doing what was necessary' at the time. Morality must yield in times of dire necessity, yet remain resolute when the final accounting is due. I must live with the consequences of my actions, rather than seek absolution from any poor choices I have made in the past. No. I am unfit to judge the Precursors.

"All portals have been activated, Sir. " IANTO reported. "Beacons launched to identify exit points."

"Good man. Well, I conjure there's nae more to be gained by sifting through this dour auld pile." I sighed wearily. "Their force-shield technology alone has made this trip worthwhile, and the ion crystals are a wee bonus for our trouble. That's good enough for me. We'll call it a day, then. Mount up."

We retraced our path back to the containment facility. I had a notion that the portal in there led to open water, so it seemed like our most logical departure point. Frankly, any place other than the Lava River would be preferable. Not entirely certain we could weasel our way through that one again and remain unscathed. That would be tempting Fate.

The containment facility's portal delivered us to a submerged platform directly beneath the Precursor gun platform. As we awaited the arrival of *Ulysses* and *Taranis*, a school of Bone Sharks cruised warily around us the whole time, only scattering in panic as soon as our transports arrived. Just as well. I've no stomach for butchering native life forms, even in our defence. Just once, I'd like to set foot someplace that isn't constantly trying to kill us.

Héloise stirred in her sleep, murmuring softly to herself. Her fine features were composed, serene and untroubled by the events of the past two days. I gazed fondly at her, taking quiet delight in the way that the light upper sheet had fallen over her sleeping form, like a fine gown on a Grecian statue. Even without using my visual enhancements, I've noticed that the gentle curve of her belly has become more prominent recently. Her pregnancy has just entered its second trimester, and that spells a definite end to any further excursions where even fools would fear to tread.

At least for now.

This isn't chauvinism on my part; not even a clumsy display of chivalry. Her life is tied to the new life she carries inside her. Our unborn daughter. I will not place either of them in such jeopardy again. If I learned anything from exploring the Lava Castle, it would have to be that there are no clever answers to the riddle of Life. For better or for worse, Life exists solely for its own purposes. To live.

CHAPTER FOURTEEN

I gasped in disbelief. "You're joking... I need a flight rating before I can take command of *Borealis*?" "I'm afraid so, Sir." JUNO grinned. "However, it's something of a minor formality in your case." JUNO is absolutely right, of course. The Interstellar Trade Commission takes a very dim view of amateurs flying capital-class starships through populated space, no matter how talented and dashing a charismatic amateur might be. Before I can legally set foot on the bridge of *Borealis* in any command capacity, I must formally qualify as a ship's master. Acquiring the requisite knowledge base is the easy part. Two hours worth of intensive data transfer from JUNO, and I'm sorted.

There's a wee catch. Even though JUNO is the only one of us technically qualified to pilot a starship, her flight rating was automatically cancelled when *Aurora* crashed. There's bound to be an official board of inquiry when we finally return to *Terra*, and the presiding silks would have a field day with that seemingly harmless snippet of information. There's far too much at stake to bodge our way through this crucial step. Prison terms all round, total forfeiture of the ship and its cargo... And that's just for starters. No, we do this one by the square and completely on the level.

I doubt if this has ever been attempted before. There's certainly no record of anyone sitting for a master's rating 175 light-years away from the ITC, so this should be an interesting exercise, to say the least. Captain Halvorsen has agreed to set things up with the ITC, acting as my examiner and professional referee in this matter. This takes 'distance learning' to a whole new level.

It's one thing to skip merrily through The Black in a sprightly *Hermes*-class shuttle, and it's something else again to make the same trip in an *Antares*-class starship. They're a lumbering beast in any kind of atmosphere. However, I think that I may have found a solution. JUNO will take command of the shuttle's flight characteristics during this exercise, altering the ship's operating parameters to mimic

the control responses of a considerably larger vessel. According to Captain Halvorsen, this should satisfy all official examination requirements, particularly in light of our current circumstances.

Héloise gave me a rough time over leaving her out of this pleasure cruise. At least she *was*, until I explained precisely what we'd be doing once the ship broke atmo. Two Hohmann transfer orbits on the way out, and two on the way back. This involves taking orbital slingshots around our closest celestial companions, *Damocles* and *Phryne*. Our *Hermes* isn't particularly fast at 0.5 light speed, so the trip out to *Carl Sagan* could take the best part of a week, even under a full burn. Those transfer orbits are necessary to put a little steam in our stride, and I tactfully suggested that her stomach probably wouldn't thank her for the experience. Our wee Spacer-in-waiting most certainly won't.

What I failed to mention is that I plan to land on *Damocles* directly after this certification flight.

I have spent decades gazing up at *Manannán*'s largest moon, wondering what secrets it might hold. Optical telescopes only tell you so much about a planet, and even a close-up view of *Damocles* gives absolutely nothing away. Just a pitted, dun-coloured ball looming overhead. Featureless, lifeless and utterly barren, even to my augmented eyes. Even *Mars* has some measure of visual appeal, albeit only a meagre handful of cosmic pranks played by aeons of geological activity. *Olympus Mons*, *Valles Marineris* and the enigmatic *Face of Cydonia*. *Damocles* has absolutely nothing at all. Uncanny, to say the very least. There must be some logical explanation for such apparent sterility. If you think I'm going to walk away from a grand mystery like that, you'd best think again.

The past three weeks have been particularly hectic. Aside from the day-to-day business of sticking the remaining bits of *Borealis* together, I have been diligently racking up some serious flight hours in our deep-space shuttle *Cutty Sark*. There's not that much difference between flying and piloting a submersible, save that things tend to happen a damn sight faster and there's a disturbing tendency for gravity to get involved. JUNO has been acting as my instructor, since there's far more to this flying business than a head full of theoretical knowledge can deliver. According to JUNO, I need to develop an innate feel for flight dynamics in order to be a truly effective pilot. Although 'becoming one with the machine' isn't an entirely foreign concept around here, I won't be allowed to cyberlink with any of *Cutty Sark*'s systems during the certification flight. In recognition of my official status as a trans-human, the ITC have stipulated that the flight must be executed without accessing any 'unusual' cybernetic enhancements. Raw skill turns the trick, apparently. I don't know what tortured logic prevailed at the ITC during the application review process, although I'm extremely grateful that Captain Halvorsen was able to plead my case. Looks like I owe him another solid... Or a particularly splendid volatile liquid. Done deal.

"*Cutty Sark* to *Carl Sagan* Actual. Pre-flight checks are complete. All ship's systems are nominal."

"Telemetry received, *Cutty Sark*" Halvorsen replied. "Your flight corridor is clear of traffic. Proceed."

"Thank you, Captain Halvorsen. ETA for RV with *Carl Sagan* is eight point five hours. Selkirk out."

"Godspeed and a smooth flight to you, *Cutty Sark*. Halvorsen out."

Simulating 1.25 million tonnes of starship lifting off is relatively easy. *Cutty Sark*'s launch thrusters have been throttled back to a mere 15 per cent, adding a suitably ponderous feel to our vertical ascent. Upon reaching an altitude of 500 metres, *Cutty Sark* swung around to the correct launch heading and tilted her bow majestically skyward. Atmospheric reaction drives ignited with a roar, accelerating the shuttle past Mach 1. The scramjets kicked in at Mach 2.5, catapulting her into a Mach 20 low orbital trajectory around *Manannán*.

"You're in the pipe five by five, Captain." JUNO announced. "We have a go for LOI burn in 720 seconds. All flight control and ship support systems are currently operating within nominal limits."

"That sounds a wee bit ominous, Lass... You're not about to drop the hammer on me, are ye?"

JUNO shrugged noncommittally. "It depends, Sir."

From Day One of my training, JUNO has been a stickler for practicing recovery from 'transient flight events'. Dead-stick landings, nav-comp errors, main drive failures, random malfunctions in RCS thrusters and so forth. Truly scary stuff, but absolutely essential skills to master. Naturally, I expect any one of these nightmare scenarios to unfold sometime during this flight. Something tells me I should have spent more time buttering up JUNO before climbing into the pilot's seat.

Cutty Sark hurtled around the night side of *Manannán*, accelerating to escape velocity. Only a thin sliver of *Damocles* is visible at this point, the countdown timer numerals are flicking off with a steady certainty. Fifteen seconds to lunar orbit insertion burn. Fourteen. Thirteen.

The nav-comp HUD suddenly flickers and dies.

"Thanks." I muttered sourly. "Switching to Bus B, secondary display. Ten seconds and counting."

JUNO nods indulgently, her lips curving into a faint smile. *You may plead for mercy now, Dear Captain.* This is going to be an *interesting* flight.

Five hundred kilometres above *Damocles*, *Cutty Sark* rotated ninety degrees, presenting her armoured belly to the monotonous landscape below. Our current velocity is 6.7 km/s, a shade below that required to maintain a standard low Earth orbit. In a few minutes, this situation will change dramatically. Meanwhile, JUNO and I have been scanning the moon's surface. To be perfectly candid, there's precious little to get excited about down there. No significant geographic features, no signs of water, no vegetation and an atmosphere that is best described as sub-optimal.

Damocles has a mean radius of 2,688 km, making it somewhat larger than *Luna*, although slightly smaller than *Mars*. Its orbital radius of 190,000 km brings it closer to *Manannán* than *Terra*'s moon, although such proximity does not appreciably increase its tidal influence on the planet. As I conjure it, this might have something to do with its current physical composition. Our sensor readings indicate that *Damocles* has roughly the same structural integrity as a Malteser with all of the chocolate licked off. In slightly more scientific terms, its surface density appears to match that of pumice stone. Great news for chiropodists, but for the rest of us, not so much. It's a downright unsettling discovery, in point of fact. There's a surface recon probe prepped and ready for launch. I'm aiming to get some sensible answers before touching down on that miserable rock.

"Orbital transfer window in ten seconds, JUNO. New heading is laid in. Throttling up for 25-g burn."

"Roger that, Sir. All systems are go." JUNO replied. "You are clear to execute a programmed burn."

Cutty Sark surged forward, the low mutter of her fusion drive rising to a subdued roar. As the shuttle shot out of orbit, the final sliver of *Damocles* disappeared from the forward viewport.

"New heading is confirmed. Commencing lateral RCS orientation burn."

JUNO raised a quizzical eyebrow, but said nothing. Technically, this manoeuvre isn't even necessary. We could travel between *Damocles* and *Phryne* tilted at 90 degrees without any difficulty at all. There's no real 'up' or 'down' in space, unless one's attitude needs to be relative to a specific point. Even so, I'm aware that we are flying on our side, and I simply wish to correct it. For purely aesthetic reasons, if you must know.

As it turned out, this was not such a good idea.

The starboard lateral RCS thruster fired normally, rotating *Cutty Sark* back into a 'normal' attitude.

"Warning. Starboard lateral RCS unit has malfunctioned. Detecting a pressure surge transient in primary propellant control system. Warning. Take corrective action immediately. Warning."

The shuttle began to rotate. Slowly at first, steadily increasing in speed as the 'jammed' valve continues to simulate an uncontrolled full-flow condition. I shot JUNO a particularly pained look.

"Now, Lass? Ye're absolutely certain ye could'na picked a better moment?" I growled, calling up schematics for the reaction control system on my HUD. The whirling star field outside looks like we're about to dive down the gullet of a black hole, making it almost impossible to interpret the system's layout against that dizzying backdrop. I sighed in resignation, activating the viewport glare filters to remove this distraction. Now we're flying without any visual frame of reference at all. *Oh goody*. JUNO smiled pleasantly, as if entirely comfortable with the knowledge that we're flying blind and barrel-rolling through space under 110 per cent thrust. On the plus side, we appear to be nicely lined up on *Phryne* for orbital insertion. Unfortunately, I have only 1.5 hours to sort this whole bloody mess out.

I'm beginning to suspect that JUNO is enjoying this experience rather more than she should.

"Starboard lateral RCS propellant inlet valve is now secured. Initiating portside lateral RCS burn."

I deactivated the glare screen on the forward viewport, and began searching for a reference point in the whirl of stars. A brilliant blue-white streak catches my eye. *Perfect*. A massive Wolf-Rayet star, burning brightly among its lesser stellar companions. My internal HUD tells me it's WR 134, located in the constellation of *Cygnus*. That will do nicely. By concentrating on the core of that dazzling streak, I'm able to use it as a timing mark to synchronise the firing of the portside RCS thruster. Each time that star hits a certain point in its rotation, I trigger the thruster. Just one quick blip, no more.

There's a definite element of risk to this exercise. *Cutty Sark* is rotating at 0.5 revolutions per second. If I lean too heavily on that thruster, there's a distinct chance that the shuttle will begin to precess in flight, with its nose and tail wobbling about the ship's centre of mass in an increasingly unstable hourglass pattern. That's not a good look for any prospective captain's qualification flight.

So far, so good. Our rotation has decreased to a slow roll. WR 134 is a discrete blue-white dot now, making it increasingly easy to correctly time each RCS firing. JUNO is watching my antics with a carefully restrained expression. *Maskirovka*. Not a devious smirk to be seen, although I'm absolutely certain she's planning something interesting for the next leg of this flight.

"Unplanned rotation corrected in six minutes, twenty-five point seven eight seconds." JUNO announced briskly. "Your response time is within acceptable indices for this type of manoeuvre, Sir."

"One does one's modest best, Lass." I grinned. "So, what's next on the menu? An Alfa Echo Three-Five unit malfunction, or the trusty old *Kobayashi Maru* scenario?"

"Don't tempt me, Sir." JUNO chuckled. "Frankly, I'm rather partial to using both options."

Cutty Sark accelerated around *Manannán's* second moon, *Phryne* and coasted toward the next waypoint. Instead of belabouring me with yet another faux-catastrophe, JUNO kept me occupied with a seemingly endless series of routine flight management drills. To break the monotony somewhat, I kept a weather eye on the nav-comp. *Carl Sagan* should be within visual range in a little under an hour, although the Phase Gate is probably the first thing we'll see. Although the Gate's five kilometres in diameter, there's absolutely no chance of spotting either of them while we're still this far out.

Shiny. JUNO has just informed me that *Cutty Sark's* deceleration thrusters are inoperative. In this case, *Cutty Sark* has to execute a 180-degree rotation. At 0.75 light-speed. Sounds like fun.

Unfortunately, flying bass-ackwards at 75 per cent of light-speed is *not* fun. Suffice it to say, what I need to do has to be done with an unseemly haste. Mass and velocity are no longer our friends. *Cutty Sark's* deflector shielding has been reconfigured to provide maximum coverage astern, since any impact to the shuttle's main drive nacelles would add a highly unwelcome level of realism to this particular flight of fantasy. This braking manoeuvre is as old-school as it gets, dating back to the hoary old days of sub-light reaction drives and unmanned probes pottering around in our own solar system. Still, it's the only viable option that will safely slow us down before we reach *Carl Sagan's* territory. The bow RCS thrusters might decelerate us... Eventually. In reality, it would be like trying to stop a bowling ball by blowing through a drinking straw. The way I conjure it, the folks aboard *Carl Sagan* might catch a fleeting glimpse of my anguished face as we screech past. Maybe.

"Co-pilot, please verify current status of all RCS thrust modules."

"Starboard lateral RCS module is offline and remains in a no-go condition. All other manoeuvring thrusters are fully operational and available for use, Sir." JUNO replied calmly.

Just as well that I bothered to check. I wouldn't put it past JUNO to simulate a full cascade failure at this point. She's doing her job rather too well, and I have to stay on top of the situation as it evolves.

"Firing portside lateral stern thrusters in five... Mark."

Rather than rotate *Cutty Sark* end over end, I conjured the most efficient method would be to swing its stern around in a horizontal plane relative to our flight path. Make the shuttle's mass and current velocity work for us, rather than attempting to cancel out a potentially unstable end over end flip. Either way will work, although the more brutal caber-toss approach uses roughly 25 per cent more thruster reaction mass to execute. You can blame physics for that one. I'm guessing that decisions of this type are one of the factors taken into account in JUNO's final evaluation.

Now comes the easy part. Deceleration.

No fingers flashing over consoles at inhuman speed here. Apart from the fact that I'm legally obliged to make this check flight entirely as a human, real and actual, this manoeuvre does require a certain degree of delicacy. At this point, slamming on the brakes will not look good on my final grade. Most deep space vehicles require a fairly generous stopping distance anyway. Remember, *Cutty Sark*'s handling characteristics have been altered dramatically, exactly duplicating those of an *Antares*-class starship. I can almost feel her artificially-increased mass all around me. An uncanny sensation.

"Main drives are online. Trajectory is nominal. Deceleration will commence in ten seconds."

A steady 1g burn for 600 seconds is sufficient to decelerate *Cutty Sark* to a more reasonable approach velocity. *Carl Sagan* and the Phase Gate are clearly visible now, and we are in no danger of slamming into either of them. Not that we ever were, of course. Even so, that was a taxing experience by anyone's standards; a fair approximation of the old Royal Navy's dreaded 'Perisher' SMCC submarine command qualification course. One small difference: If I wash out on this run, there'll be no bottle of whisky to crawl into as a consolation.

"All ship's systems have been reset to fully operational conditions, Captain. Please be advised that this phase of the evaluation has concluded. You are now clear to initiate docking manoeuvres."

"Thank you, JUNO." I replied. Probably not the time to ask how I'm doing so far. Besides, I'll know soon enough. There's more of the same waiting for me after our courtesy call on the *Carl Sagan*.

"TCS *Carl Sagan* traffic control to TCS *Cutty Sark*. We are currently tracking you on a close approach vector, one thousand kilometres from our operational perimeter. Please state your intention. Over."

"*Cutty Sark* to *Carl Sagan* actual, requesting docking permission. Over."

"Permission granted, *Cutty Sark*. Port docking bay 3 has been made ready for your use. Well done, and welcome aboard, Captain Selkirk. *Carl Sagan* actual, out." Captain Halvorsen replied.

In flight configuration, *Carl Sagan* is roughly two-thirds the size of *Aurora*, although she is a completely different class of vessel. *Hephaestus*-class construction ships are based on an expanding modular hull design, enabling them to convert into deep-space construction yards upon reaching their destination. This means that there's a fair amount of protruding parts, gantries and partially assembled Gate components sticking out at unlikely angles, all poised to make life interesting for any approaching ship. Fortunately, Captain Halvorsen has left the lights on. I'd call that a kindness.

No automatic approach systems for our wee Alex. Not this time. Visual flight rules are now in effect. JUNO decided to spring this one on me at the last minute. In keeping with the spirit of the game, I now have only two flight instruments at my disposal. Fortunately, one of them is an accelerometer. I conjure JUNO left me with working proximity sensors as a basic courtesy gesture to Captain Halvorsen, if not entirely out of concern for *Carl Sagan*'s immaculate paintwork.

"EXERCISE. EXERCISE. EXERCISE. TCS *Cutty Sark* on docking approach, portside Bay Three. We have experienced a critical instrumentation failure, requesting clearance for a visual approach landing."

"*Carl Sagan* docking control to *Cutty Sark*. EXERCISE comms prefix is noted and logged, *Cutty Sark*. You are cleared to execute a visual approach and landing sequence. All docking bay safety systems are now active. Please proceed at your own discretion."

Cutty Sark manoeuvred into alignment and approached *Carl Sagan* at a prudent 20 metres per second, decelerating gradually as it neared the cavernous docking bay. There's no bonus points awarded for showmanship here, so I'm aiming to make this operation as straightforward as possible.

Cutty Sark landed as lightly as thistle-down. As touchdowns go, it wasn't too shabby. I commenced engine shutdown procedures immediately, mindful of the *Sagan's* refuelling crew already assembling on the flight-deck apron. Docking control has informed me that turnaround will take a couple of hours, placing us entirely at liberty for the duration. A perfect opportunity to make our social rounds at a civilized pace. First things first, though. There's a comprehensive post-flight checklist that needs to be completed before my bahookie leaves the pilot's seat. All by the book.

Captain Halvorsen was already waiting for us at the head of the gangway. As the airlock doors slid open, JUNO and I braced to attention, saluting both Halvorsen and the *Carl Sagan*. Some might consider this an outmoded affectation, particularly those in the Merchant Service, although it struck me that Halvorsen would appreciate this gesture. Over the course of the past few months, I believe that I've gauged my measure of the man well enough. There are still a few who follow the traditional ways, sharing a distant kinship with the mariners of old. Jens Halvorsen is such a man. "Acting Captain Alexander Selkirk reporting, Captain Halvorsen. Permission to come aboard, Sir?" "Granted, Captain Selkirk." Halvorsen smiled warmly, returning our salute. "Welcome aboard." "Thank you, Captain Halvorsen. Allow me to introduce my First Officer, Commander JUNO." We shook hands, then Halvorsen ushered us towards a waiting shuttle tram. Looks like it's time for our fifty-Credit guided tour of *Carl Sagan*.

Carl Sagan's interior layout is significantly different to that of *Aurora*. We travelled down Broadway, and my head was on a swivel all the while. I've never been aboard a *Hephaestus*-class ship before, so this is a trip to the sweet-shop, at least as far as I'm concerned. One thing's certain, hull designs have evolved somewhat since my death. There are signs that many core system technologies have also moved on a piece, but there are still reassuring echoes of the old Alterra design philosophy to be found here. Incidentally, since I'm not currently under formal evaluation conditions, I took this opportunity to go completely cyber on *Carl Sagan's* inner works, accumulating a wealth of engineering data on every system that came within range of my sensors. Technically, it's not considered to be industrial espionage, provided that one asks the Captain's permission first.

Our arrival coincided with chow time aboard *Carl Sagan*. Halvorsen tactfully indicated that he wouldn't mind a bite to eat, but he doesn't want to leave us twiddling our thumbs while he feeds the inner man. Naturally, he's fully aware that we're both androids. This admission of humanity must have caused him a bit of anxiety. No problem. Shepherd's Pie for me. JUNO's up for a Philly steak.

"Orbital correction burn complete. JUNO, commence a synthetic-aperture deep radar scan." "Aye, Sir." JUNO replied. "Still no response from our recon probe. There is a significant probability that it may have been damaged or destroyed during atmospheric entry. I have obtained a clear fix on the probe's entry corridor, but cannot determine its exact landing site by spectroscopic analysis of the heat shield vaporization trail. It has dissipated over too wide an area to provide any meaningful data on the probe's projected LZ... I'm sorry, Sir." "It's not your fault, Lass. How about your best ball-park estimate, then?" I replied cheerfully. JUNO shrugged. "Our probe could be anywhere within a 150 kilometre radius. However, I'm not entirely certain that any useful information would be gained from its recovery. Shall I prepare another probe for launch, Sir?"

"Please do. By the by, it might be best to deploy it after we hit atmo. I'll keep us in a holding pattern at ten thousand until the probe checks in dirt-side. That should give us a reasonable safety margin."

I'm extremely grateful that *Damocles* isn't equipped with its own Precursor particle beam weapon. *Cutty Sark* would make a tempting target as it sinks slowly into the planet's gravity well. JUNO launched the probe ten minutes ago, and we're basically dawdling along in its wake. Our first impressions of *Damocles* aren't exactly what I'd call promising, unless you have a craving for a thin atmosphere and excruciatingly desolate landscapes. On the positive side, it does have a functioning magnetosphere. If you're unlucky enough to get stranded here, there's no need to worry about solar flares scrambling your DNA. You'll die of boredom long before that becomes an issue. Aside from that one redeeming characteristic, *Damocles* has the same visual appeal as a tray of cat litter.

"The planet's surface is entirely composed of almost pure silicon dioxide, Sir. The probe is detecting infinitesimal traces of iron, magnesium and a small percentage of other heavy metals, although their concentrations are far below any exploitable levels. No detectable evidence of any organic material, metabolic residues or radioactivity in the soil, although trace values were found in the atmosphere."

"Looks like this place has been thoroughly strip-mined for resources. At a wild guess, I'd conjure our mystery miners might have used matter transmission to selectively extract minerals from the rock."

"An interesting hypothesis, Captain." JUNO replied. "May I ask how you arrived at this conclusion?" I grinned confidently, sensing a faint note of challenge in JUNO's otherwise polite enquiry.

"Yon rock matrix is still intact, yet there is almost perfect uniformity in its chemical composition. That's about as far from natural as any planetary surface can get. Furthermore, if this planet was mined using conventional extractive technology, its surface would be all torn up. I'm not seeing that here... No soil disturbances, no processing facilities, and no signs of remediation, either."

"Since I am unable to formulate an alternative explanation at this point, I do feel somewhat inclined to agree with your initial observations, Captain." JUNO conceded reluctantly.

Pareidolia is the precise word that springs to mind here. I'm seeing vague patterns in the landscape where none should exist. The only explanation that I can offer is that I'm desperate to see something other than that sterile beige monotony crawling below us. I've brought *Cutty Sark* down to 1000 metres and JUNO is currently scanning the terrain for a safe landing site. This could be a mite problematic, since the planet's surface is even more treacherous than it first seemed. Deep radar scans reveal that *Damocles* is riddled with hidden subsurface fissures and voids, scarcely covered by a brittle skim of depleted rock. While it might be technically possible to set the ship down practically anywhere, that's not a risk either of us are willing to take. More *firma*, less terror.

"Two hundred metres. Rate of descent, five metres per second. Mass compensators at 25 per cent."

"A suitable landing site has been found, Captain. Heading zero-four-zero. Range, one kilometre."

Cutty Sark banked in a gentle sweeping turn, lining up for landing. According to the GPR readout, the planet's surface appears to be more or less in one piece there. Now that I've had a first-hand look at this place, I'm not entirely happy about parking a *Hermes* shuttle anywhere down there. JUNO has performed a deep scan of our intended LZ, confirming that it's reasonably solid to a depth of 500 metres. Unfortunately, that's about as solid as the ground gets on *Damocles*.

"Ten metres... Five. Contact."

"Sir! Surface penetration by aft port landing gear! Sixty-five centimetres!" JUNO cried in alarm.

"Whoa, Nellie!" I yelled. "Correcting trim. Mass compensator output increased to 50 per cent."

A faint crunching sound carried through the hull as *Cutty Sark* resettled itself on the surface.

"Like landing on a bloody meringue." I muttered. "How's our situation looking now, JUNO?"

JUNO frowned. "Extremely tentative at best, Sir. Before we leave the immediate area, I strongly recommend planting an array of seismic probes to continuously monitor the landing site."

"Aye. We're no' equipped to haul a ditched shuttle oot of a crevasse." I admitted. "Having said that, it might be worth suiting up with this terrain firmly in mind. Ground's far too risky to use ExoSuits. We'll have to make do with full HAZMAT environment rig, abseiling gear and repulsion cannons."

"Under these circumstances, a most sensible precaution, Sir. The atmosphere has a very high concentration of suspended silicon dioxide dust. Average particle size is around 0.25 microns."

"Hmm... Our standard atmo filters would clog solid in about ten minutes. Ah've nae mind to spend the weekend dusting off ma nooks and crannies with a compressed air jet, thanks verra much."

Alien soil crunched underfoot as I stepped off the gangway's landside plate. I bent down, scooping up a handful of silicate dust finer than talcum powder. As I closed my hand around it, nearly half of the dust puffed out in a cloud, swirling away on the faintest whisper of air. A desolate world, unrelentingly grim and cheerless. Unconsciously, I allowed the remaining dust to fall from my hand.

There is something horribly wrong here. I cannot put my finger on it. An undefinable sense of isolation and a growing unease. I have never seen a world so utterly lifeless as *Damocles*. Even the most barren plains of Mars carry a hidden potentiality about them, but here there is... Nothing.

I watch JUNO as she plants the seismic sensors around *Cutty Sark*. Merely a precaution. There is absolutely nothing here to hold our attention for any appreciable length of time; no life, no natural landmarks, no ancient cities lay buried beneath shifting sands. Only a desolate, forbidding expanse.

"All sensors are deployed, Sir. No further ground subsidence is detected. The LZ is currently stable."

"Thank you, JUNO. Time to take a wee stroll, then. I could definitely use a change of scenery."

It's a hard slog. Shin-deep dust drags at our legs, the ground beneath crumbles underfoot. We're raising so much dust that we have to stop and wipe our helmet visors clear every fifty metres or so. Coated from head to foot in that gorram dust, we are effectively invisible to the naked eye. *Damocles* is trying to swallow us whole.

"Och, this is bloody pointless!" I growled. "Next time I suggest something as daft as this, belt me."

"That thought has occurred to me, Captain." JUNO replied candidly. "However, using our environment suit EDF systems to repel the dust may provide a far more beneficial outcome."

"I'm all for calling it a day, Lass. We've come a fair distance already, and there's nae change at all."

"I concur whole-heartedly, Captain." JUNO sighed, sounding genuinely disappointed. "Apart from some isolated traces of element 171, there is absolutely nothing remarkable about this terrain..."

I stopped dead in my tracks. *Whoa. Hold the phone.* "Did you just say element 171?"

JUNO's brow furrowed with concern. "Yes, Sir, I distinctly recall saying it. Is there anything wrong?"

"My bloody oath, there is." I murmured. "Element 171 is a primary constituent of Precursor structures and much of their fine technology. One thing's certain, 171 does'na occur naturally. It's a synthetic composite material, no' an actual element as such. We fair ran intae a brick wall trying to figure oot the go of it, if ye recall rightly."

"I do indeed, Sir." JUNO replied. "Furthermore, I fear that I may have made a serious error in judgement by rejecting significant data without rigorous evaluation. An error I shall rectify immediately, Sir."

I patted JUNO's shoulder comfortingly. "Fair do's, Lass. I completely missed it too. Nae harm done."

The polarised fields emitted by our environment suits works like a charm. That talcum-fine dust refuses to settle anywhere on our bodies, instantly repelled by low-intensity electrostatic pulses generated by the EDF system. Even the dust crowding around our legs backs off to a respectful distance. Effective as it is, JUNO's clever solution can't be maintained for any great length of time. For one thing, it's playing merry hell with our internal sensors. It's also a hefty drain on our suit power cells in the long run. Even though our gear is using those superb Precursor ion batteries and power cells, I estimate we'll have chewed through at least eighty per cent of their total charge during our return to *Cutty Sark*, still some 3.5 kilometres distant. JUNO has launched another three recon probes, making good on her promise to provide a coherent picture of what has happened here. My first guess was a catastrophic volcanic event, but there is no rational explanation how *Damocles* could puke out such a large and relatively homogenous mass of silicon dioxide. True, there are miniscule variations in its composition from site to site, as JUNO and I are now discovering... Much to our mutual chagrin. As it turns out, I wasn't seeing things after all. There *were* buildings here. Precursor buildings.

With all four recon drones deployed, we are now able to accurately map a strip of terrain four kilometres wide. Remote sensors have been re-tuned to screen out everything but the presence of element 171, and the results are staggering. Believe it or not, this featureless plain was once a city.

A pretty substantial city, at that. Judging by the ghostly outlines that remain, these buildings were constructed on a gargantuan scale, easily eclipsing all of the structures we've found on *Manannán*. We're getting excellent data. I conjure it would be possible to construct a 3D map of the former city, although this is not the ideal time or place to start crunching the numbers. Not a high priority, especially since there's less than an hour until sunset. We'll take what we've got and call it a day.

My mind keeps coming back to the idea of some cataclysmic event. Definitely not a natural phenomenon. The destruction here is absolute, and utterly chilling in its precision. There is nothing random about it. Massed fire from intrinsic field disruptor rifles would have blown half the planet away, so they're crossed off my suspect list. No known explosive device could destroy everything in such an orderly manner. It's as if these buildings were ripped from the face of the planet and crumbled into a fine powder. It has to be a weapon we haven't seen yet... OH HELL NO.

"RUN!"

This is a novel experience for both of us. Running for our lives.

"I'm bringing the ship in on remote to meet us halfway. JUNO, take charge of the drones and begin scanning for EM energy signatures, broad spectrum. Something tells me we're no' alone out here."

JUNO nodded, patching the drone video feed directly to my HUD. The drab scenery disappeared, instantly replaced with a ghostly expanse of swirling, shifting colours. Viewed in this manner, the planet's surface takes on the appearance of a soap-bubble, the HUD's false-colour image indicating EM field amplitude and proximity. An ancient evil stirs from its slumber of aeons. Its hunger is huge. "Send the drones up to 250 metres. We're still too far away to establish an uplink with the shuttle."

"Aye, Sir." JUNO replied. "Drones are now in position. Detecting a significant increase in subsurface EM activity surrounding the ship. Warning. Stern sector seismic probe has ceased transmission."
"Confirmed. Portside probe is gone too. We'll be cutting this one mighty fine, Lass."

Cutty Sark has been completely encircled by an immense swarm of nanites. The two remaining seismic probes winked out in quick succession, and then the entire mass converged on the shuttle. I watched in horrified fascination as the swarm grew rapidly in volume, boiling up from the depths of *Damocles* like lava. With nothing left to consume, the nanites must have lain dormant just below the surface or clustered around the molten core of *Damocles*, passively drawing on its thermal energy to sustain them in a low-power mode. Whatever the case, our arrival has provided them with additional resources and fresh targets. I am uncertain whether these wee horrors have the physical capacity to gain control of *Cutty Sark*, although it's a contingency that I'm fully prepared to prevent. As soon as I can uplink with the shuttle, there will be an unpleasant surprise for everything within a ten kilometre radius. If we're lucky, *Damocles* should remain mostly intact afterwards.

More bad news. Scans have revealed an offshoot of the central mass of nanites homing in on us. Even though we're loping along at a steady 30 km/h, it would be extremely unwise to step up the pace. The ground underfoot is treacherously fragile. Doubling our running speed would increase the amount of kinetic energy that we deliver to the ground with every step, and there's a maze of crevasses waiting to receive our artfully-wrought bodies. I'm sensing a definite hare and tortoise motif at work here.

We finally have a clear visual on *Cutty Sark*. I should be getting a handshake signal any moment now. JUNO has parked the drones at an altitude of 50 metres, and we're getting a close look at what we're up against. Our shuttle is surrounded by a churning lake of green-tinged silvery fluid, which appears to be sending out multiple tendrils in an attempt to penetrate the graviton barrier generated by the ship's mass compensators. However, that field is currently counteracting fifty per cent of a 15,000 tonne shuttle's mass. Good luck getting through that, ye nasty wee buggers.

If we weren't in such a dire pickle, I could watch these nanites for hours. The main mass behaves exactly like a ferrofluid, forming a bewildering array of elaborate spikes and spires on its surface. Fortunately, my Engineer Gene kicked in at this point. The nanites aren't putting this display on for their own amusement. They are now attempting to create stable structures that will penetrate or circumvent the graviton barrier. Furthermore, the swarm has expanded to a radius of nearly 500 metres and is extending a tendril directly towards us. I can only assume that we have been selected as the dessert course. Still not close enough for an uplink handshake with *Cutty Sark*. Gorram it.

"Hitch yez skirts up, Lass. We're going for a paddle."
JUNO stared at me in frank disbelief.

"Captain, if you're thinking of approaching the nanite swarm any closer, I must respectfully object. Even now, our chances of survival are ridiculously low. In addition, your next order may trigger an ATG protocol conflict. I cannot execute any lawfully-issued command if it explicitly violates my self-preservation programming constraints, which I assume it most certainly will. I sincerely apologise."

"It's no' stopped you before." I grinned. "Verra weel, yer official objection has been duly noted, and I fully endorse yer assessment of oor current situation. However, yon goose is nae cooked yet."

JUNO's expression assumed an air of grim resolve. "What course of action do you propose, Sir?"
"Reset yer suit's EDF to a maximum output 25-millisecond pulse, an' follow ma lead. Stay close."
"Precisely what I was hoping you'd say, Sir. Lead the way."

Our suit defence fields arced up with a vicious, crackling hiss, enveloping both of us in their shimmering blue glare. If we're fated to go down on this forsaken pebble, we'll definitely go down swinging.

"Howay, ye manky wee bastards! Chew on this!" I roared, ploughing into the silvery mass. The EDF pulses arced through the densely-packed nanites, instantly rendering them inert. Unfortunately, the electrical discharge only appeared to propagate in a twenty-metre radius before the surrounding nanites apparently figured out what was happening, and hastily withdrew.

That's good enough for me. Keep running and show those nanites a clean pair of heels.
One hundred and fifty metres in, my HUD flashes an alert. Commlink available. Work fast, wee Alex.

+++AUTHENTICATION CODE ACCEPTED> REMOTE COMMAND INTERFACE ONLINE.+++

First job, get that boat off the deck. Take her up to fifty metres and hope that those buggers haven't worked out what we're about to do. The shuttle rises obediently in the distance, swinging her nose around to meet our heading. We keep running, our feet skimming lightly over the crumbling ground as we follow our outbound track, now swept clean of its smothering fine dust. Robbed of a far more tempting prize, the nanite swarm has now turned its full attention to JUNO and I. Questing, green-tinged tentacles of hellish quicksilver rise all around us, actively probing for any weakness in our electrical defence fields. We hit the swarm at full speed with our blazing shields intact, the mass surged forward in an immediate attack response. *Ants, meet Boot*. Their intricate inner workings are instantly immolated on our shields, charred far beyond their creator's art to restore. We charge onward like a pair of enraged gods, leaving nothing but drifting ashes and ruin in our wake.

Cutty Sark loomed directly overhead. We halted our wildly successful *banzai* charge. The graviton field of the ship's lifters presses down hard upon our bodies. We are beginning to sink into the crust of *Damocles*. The shuttle delicately rotated into position, its amidships cargo bay doors now fully open.

"Grapples, oan the bounce!" I barked.

We soared into the air like a pair of bottle-rockets. I looked down, infinitely relieved to see the small empty space that we had fought for and held still remained clear. The downwash from the graviton lifters would be sufficient to hold the nanites back. However, I want to keep as many of them as I can in the smallest possible area. On our way up to the cockpit, I outlined my next move to JUNO. Suffice it to say, her reaction was delightfully candid.

"With all due respect, Sir... HAVE YOU GONE COMPLETELY INSANE?"

"Nay, Lass." I replied mildly, scratching my beard. "D'ye conjure it would help?"

My flippant response caught JUNO completely off-guard. True, this stunt has a definite whiff of pure insanity about it, although I've recalculated the numbers enough times to ensure a reasonable measure of success. However, I don't recommend this manoeuvre at all, unless you're made of The Right Stuff... In our case, that happens to be a fairly substantial endoskeleton of titanium poly-alloy.

"Primary drives are online. Mass compensators reset to 95 per cent load. Commencing pitch-up."

"Captain, there is a significant probability that this manoeuvre will result in our immediate destruction. I urge you to reconsider this course of action."

"Fair comment. I'm working with the first tool that springs to hand, Lass." I murmured. "Stand by."

Cutty Sark rotated into a vertical launch position. An awkward pose, particularly for any vessel normally launched from a horizontal orientation. Under normal circumstances, the cockpit would be a cacophony of alarms and red flashing lights at this point, and rightly so. This isn't a recommended launch configuration for any vehicle equipped with a fusion drive. There's a very good reason why.

"Aw reet, Lass... Let's make some glass."

Cutty Sark's drive chambers rumbled into life, barely ticking over. With any luck, the nanites below would detect a gradual increase in heat and attempt to draw upon this sudden influx of energy. Through the aft camera view, I can see the ground directly below the ship beginning to crumble under the influence of the mass compensator's graviton field. By decreasing its output a notch, I allowed the ship to sink to an altitude of 40 metres, bringing the ship's plasma exhaust jets into direct contact with the planet's surface. Our wee pals should be feeling some heat any moment now.

"Swarm density is still increasing on the outer periphery, Sir. Fifteen seconds before critical mass."

"Give us a hoy when they're all in. They'll be strollin' up to dine on their mates. They're no' proud."

"NOW!" JUNO yelled.

I shut down the mass compensators, simultaneously increasing thrust on the main drive. *Cutty Sark's* twin fusion drives flared, instantly vaporising everything on the planet's surface within a one-kilometre radius of the ship. We shot skyward at Mach 10, instantly accelerating at a rate that would have pulverised a human body. Come to think of it, that ride was none too comfortable from an android's perspective, either. The ship's inertial damping field did its best to cope... Poor thing. Rather than resume our flight homeward, I shut off the fusion drive at apogee and engaged the shuttle's atmospheric flight mode, allowing *Cutty Sark* to decelerate and re-enter *Damocles'* atmosphere at a far more sensible velocity. One thing's certain; I won't be trying that mad move again. A 100-g acceleration achieved in under five seconds isn't an experience that either of us would care to repeat. Fortunately, our inner works were up to the job, but only just. The shuttle's structural integrity also suffered some grief, although it's nothing that a few days in dock won't fix.

Our launch site is hard to miss. The plasma flare from *Cutty Sark's* fusion drive has formed a seething lake of molten silicon dioxide, approximately 250 metres in diameter. Beyond the initial blast zone, the wave of intense heat that followed instantly vitrified the planet's surface more than 800 metres out from the epicentre. Thermal scans indicate that a superficial layer of less than a metre has been converted to glass, and it is beginning to solidify already. There is an unmistakeable green tinge to the outer edges, like uranium oxide glass. At least we managed to catch some.

"Captain, I am unable to detect any nanite EM activity. Residual thermal energy is masking their specific emission frequency, and I cannot reliably determine if any nanites survived. I'm sorry, Sir."

I shook my head. "Assume the worst possible case, Lass. It only takes one to rebuild a new swarm. I conjure we'll be needin' to beg a wee favour of Captain Halvorsen. Eight of them, to be precise."

After a couple of slow orbits of the crater, it became obvious that nothing more could be gained from watching a massive puddle of glass slowly cooling.

I estimate that it will take at least a week before it solidifies, and at least another fortnight before it cools down to ambient temperature. It's definitely too early to tell if any nanites survived, and we're not planning to hang around waiting to find out. My greatest worry now is that we have achieved nothing more than creating a vast pool of resources for any surviving nanites, and it won't take the swarm too long to rebuild up to its original mass.

"JUNO, please reconfigure that last recon probe for semi-autonomous patrol mode. Continuous sweep across the full EM spectrum. Enable close approach and full hazard avoidance behaviours."

"Aye, Sir." JUNO replied. "Parameters accepted. The probe is now configured and ready for launch." I launched the probe, then pointed *Cutty Sark's* bow skyward. One close call is quite enough.

"TCS *Cutty Sark* to *Carl Sagan* Actual. Priority One transmission pending. Please respond."

"*Carl Sagan* Actual online. Go ahead, Captain Selkirk."

"Requesting secure communication link. Inbound encrypted data stream is intended for your eyes only. Please authenticate secure comm link status with your Alterra command ID Sigma."

There was a brief pause, then Halvorsen replied. "Received and understood, Captain. Stand by."

Halvorsen's command ID flashed up on the comms console. Credentials verified. Link is secure.

"Thank you, Captain Halvorsen. Uploading the data stream now. Decrypt using Savoy IV key."

"Data received, *Cutty Sark*. Wait ten."

"Understood. Standing by."

Precisely ten minutes later, Halvorsen's weathered face appeared on the comms screen.

"I can see why you wanted this business kept under wraps, Alex." Halvorsen said gravely. "If Alterra gets the slightest whisper of what you're asking of me, we're both finished. I have to account for every microgramme of fissile material on *Sagan's* manifest. This goes well beyond sneaking a handful of SmartPens from the Purser's locker. There's no possible way I can help you. I'm sorry."

I grinned conspiratorially. "Och, I can supply the fissionables. Nae probs. What ah really need is tae borrow one of yer atom-jacks for a spell... A lad or lass that ye trust implicitly. Preferably one who doesn't quite see eye-to-eye with them daft wallies further up the ziggurat."

Halvorsen rubbed his chin speculatively. "*Ja*. I believe I might have the person you're looking for. Radka Zelenka. As long as you're not from Corporate, you and her will get along like a house on fire. She's bored out of her mind right now, and I'm sure she'd welcome a chance to blow something up."

"She sounds like a fair handful." I chuckled. "Rather like a certain lass o' ma ain acquaintance."

"Radka's a fine hand, provided she's kept busy." Halvorsen replied. "Since her particular skills haven't been in demand since we set up here, I've had her baby-sitting the Engineering department. There's not much else you can do with someone who builds customised rock-busters for a living."

"Verra weel, if you could brief her oan the particulars beforehand, we'll set up a workshop tae her exact specifications. Then it's just a matter of sending her planet-side during the next R&R rotation."

"One thing still puzzles me, Alex... You and your crew could easily build these devices. How could you possibly need Radka's help on any of this?"

I shrugged. "Any bampot can build a nuke. It may even go off as intended. We need eight of them. One point five megatons maximum yield for each device, verra heavy on the gamma output. Suffice to say, yon level of expertise is slightly beyond oor modest aspirations right now. Given the fragile nature of oor intended target, this job calls for a rare and most delicate touch. We need an artist."

"Skull Island ATC to Cutty Sark. We have you on final approach vector. Welcome home, Captain."
"Thank you, Mister Savini. Please inform Héloïse, IANTO and DIGBY of our imminent arrival."
"Aye, Sir." Enzo replied. "If you don't mind me asking, Sir... How was your checkout flight?"
"A bit of a doddle, actually. Thanks for asking." I replied casually. JUNO sighed, rolling her eyes.
"You haven't qualified yet, Captain Hotshot." She whispered, shaking her head in mock exasperation.

Later that evening, the crew gathered in *Margaritaville* for a richly-deserved unwinding session. With the next batch of shore-leave personnel due in less than 24 hours, I conjured we could use a short break before returning to the daily grind. Besides, I have an ulterior motive for this jug-up. Sensing a brief lull in the general uproar, I tapped my glass with a spoon, signalling for silence.
"Gentles all, pray attend for a moment. I have some information that I'd like to share with you."
I stood up, noting that most of the bar's patrons had turned attentively in my direction. Splendid.
"As you may already know, *Borealis* is almost ready for human occupation. If our current rate of progress remains constant, we should reach 95 per cent completion in one month's time. The ship's hull is already space-worthy, and primary engineering systems such as power, life support, shields and propulsion are installed and fully commissioned for service. A brilliant effort from all involved." I waited for the whooping and hollering to die down a little, raising my hand for silence once more.

"We shall be recruiting another intake of non-specialists, with an eye to training them for a variety of essential shipboard duties. Engineering, maintenance, life sciences and marine biology will be skills in high demand once *Borealis* has launched, as it will be another three months before the phase gate is operational. During this time, *Borealis* will undergo a comprehensive shake-down cruise. Unfortunately, this delay is as unavoidable as it is absolutely essential. Once we pass through *Carl Sagan's* phase gate, we are well and truly on our own. Transit times between gates do vary considerably, and it necessitates passing through normal space for weeks, or even months at a time. Think of that delay after launch as a period of acclimatisation to shipboard life. Mind you, there's plenty of creature comforts onboard *Borealis* to pass the time. It shouldn't be too unbearable." That's what I like to see. Happy, smiling faces with a genuine reason to celebrate.

"Thank you. Now, just one last thing afore I shut up... Mister Savini, would you stand up, please?"
A look of pure bewilderment flooded over Enzo's face. *Ha! Gotcha. Totally unexpected.*
"S-sir?" Enzo stammered uncertainly. He rose smartly from his seat, nevertheless. Good lad.
"Mister Savini, in due consideration of your exemplary performance as an Ensign of the Merchant Service, it is my distinct pleasure to promote you to the rank of Lieutenant, First Class. Well done!"
Aye. He's already blushing deep into the infrared. Now, let's get this wee pollywog good and wellied tonight, by way of throwing him a proper celebration. If nothing else, I'm a reet stickler for tradition.

The following morning, our freshly-minted Lieutenant Savini appeared to be little worse for wear. True, he passed through his 'baptism' in The Usual Manner, as have many of his brothers and sisters in the Merchant Service. Yes, there was even some raucous singing. A great deal of it, actually. To his credit, Enzo passed through the maudlin phase of inebriation without becoming lachrymose, although not before firmly asserting that he loved us all, JUNO in particular. She took this sudden revelation quite well, all things considered. Inevitably, he responded to the call of duty around 03:45, opening up an emergency commlink on the Porcelain Transmitter. As the prime instigator of his unfortunate condition, Yours Truly took sole responsibility for cleaning him up afterward. As a

kindness, IANTO gave our brave lad a shot of NeutraChem before we finally tucked him in for the night. Net result: One fully-functional human being, mercifully minus a truly heroic hangover.

The following morning, our breakfast meeting seemed to be something of an ordeal for young Enzo. He sat hunched over, rarely speaking and barely touching his food. It doesn't take a degree in psych to figure out what's going on in his head at the moment. Looks like it's time for an intervention.

I stood up, ostensibly to fetch a fresh pot of tea from the auto-galley. On my return to the table, I stopped at Enzo's side and placed a comforting hand on his shoulder.

"Just say it, Laddie. You're among friends here. It's eating you up for nae guid reason." I whispered.

"A-aye, Sir." Enzo stammered.

As I sat down, Enzo stood up, albeit reluctantly. I have never seen the lad so rattled as he is now.

"Yes, Mister Savini?" I prompted, smiling pleasantly. "Please proceed."

He braced smartly to attention. "Sirs, I sincerely apologise for my behaviour last night. If I have offended anyone, I freely admit that my judgement was impaired by an excessive intake of alcohol. Although I have no clear recollection of the previous night's events, I respectfully submit to any disciplinary action that you may see fit to impose."

I frowned in my most earnest manner, steepling my fingers with all the gravitas of a presiding judge.

"Mister Savini." I pronounced gravely, "Were you at any time derelict in your appointed duties, Sir?"

My question appeared to catch him off guard. "No, Captain. I was not on duty at the time."

"I see. Now, I address my next question to the other crew members... Were any of you offended by the alleged misbehaviour of Lieutenant Savini, specifically in the period between 20:30 and 03:45?"

I glared sternly at JUNO, IANTO and DIGBY, each one responding in turn with a brisk "No, Sir!"

"How about you, Mme. Maida? Were you offended at any point during the night's proceedings?"

"*Non*. I had a most wonderful time, *mon Capitaine*." Héloïse replied languidly.

"I see. Now that the facts are established to my complete satisfaction, I hereby pronounce that your apology is duly accepted, despite an unprecedented lack of offended parties, real or otherwise. Mister Savini, by voluntarily presenting to the Captain's Mast, you have comported yourself in a manner befitting an Officer and a Gentleman. Let the ship's log show: In light of highly extenuating circumstances, your behaviour remained within established parameters. No further action required. Carry on, Lieutenant."

"Thank you, Sir." Enzo breathed gratefully.

"Now finish up yer brekkie, Lad." I said, grinning. "Daylight's burning, and there's a big day ahead."

I stopped by *The Broch's* R&D lab before setting off on my morning rounds. IANTO and DIGBY have completed a working prototype of the Precursor fluidic shield, and we're planning to install an array of emitters on all of the islands, hopefully sometime this afternoon. Just in the nick of time too, it seems. Our *Argus* satellite net is tracking some increasingly heavy super-cell activity building up in the west. The sea state is still vaguely tolerable, but it won't be too long before that storm surge starts rolling in. *Carl Sagan's* passenger freighter is due to arrive around dusk, so we'll have to get *Skull Island's* shields online as soon as possible. With any luck, we should also have just enough time to install force field emitters on *Kaori-san no-shima*. The colony can withstand a decent blow this time around, so *Skull Island* gets full priority on this job. Besides, if anything does go wrong when we fire up the shield, we'll only have to patch up the landing pads and support buildings afterwards.

I hate these rush jobs. Even so, we must press on regardless. In a pinch, we could divert the freighter to the pad on *Kaori-san no-shima*, although there will be no time for social niceties once it lands. Bundle the tourists straight into the colony, give the ship's fuel tanks a quick top-off and send it straight back into The Black. You can put up an umbrella, but you won't stop the storm.

Lightning flared on the horizon, now darkening to an ominous steel-grey. A barely-audible mutter of thunder followed thirty seconds later. The storm front is only ten kilometres away, and we don't have the fluidic shield online yet. Placing the field emitters proved to be slightly trickier than we initially supposed. The first few were an absolute devil to align manually, so we've had to modify their design 'on the fly' to incorporate an extremely precise GPS transponder. So much for referring to our PDAs and simply plonking them down in the general area. The best we can manage is millimetre-range accuracy over a maximum span of fifty metres between each emitter. It has taken us the best part of eight hours to lay one hundred emitters and accurately align each of them. We're cutting it awful close now, as is the pilot of TCS *Porkchop Express*. ETA, twenty-five minutes.

"Selkirk to *Skull Island* Control. Last emitter's locked in place. Commence power-up sequence."

"Aye, Sir." Enzo replied. "Main reactor is online in standby mode. Safety interlocks are engaged. Output voltages of auxiliary reactors *Alfa* and *Bravo* are stable and fully synchronised. Status is green across my board. Power distribution network enabled. Activating the emitter array now, Sir."

An acrid tang of ionization hit my olfactory sensors like a hammer blow. The atmosphere around us began crackling and throwing off eye-searing arcs of stray electricity, as if we had somehow drawn the approaching storm down upon ourselves. *I really don't like the look of this*. Something's obviously way out of kilter. JUNO, DIGBY and IANTO appear to be equally concerned, backing away from the shield's periphery with commendable haste.

"Enzo! What the hell's happening up there, Laddie?" I roared into my commlink.

"Network instability. Minor phase variance detected in emitters 3 and 4. Correcting it now, Sir."

Something miraculous has happened. The field's vicious arcing and spitting ceased within seconds of Enzo signing off, that insane cacophony replaced with a faint microwave hiss that hovered on the absolute threshold of my hearing. A single pure tone, entirely free of annoying sub-harmonics.

The field flickered into view, a ghostly aurora rising from the ground, arcing skyward. As the fluidic shield coalesced into a unbroken hemisphere, it took on a swirling, opalescent shimmer, the last rays of fading sunlight refracted through a single layer of atmospheric water molecules. Magnificent.

A less poetic soul might compare it to being trapped inside a soap-bubble.

"Now for the auld drop test. Ye'd best stand a ways back... Ah's gan' all Neanderthal fer this yin."

The crew backed off about fifty metres or so, just to be on the safe side. I stooped, picking up a small rounded pebble, along with a fist-sized chunk of basalt. Ten metres from the shimmering barrier, I flicked the pebble lightly at the shield like a marble, noting that it passed through easily. Satisfied with this preliminary result, I walked back to where the crew stood, grinning evilly.

"Ah've nae idea where this yin's endin' up. Engage predictive tracking mode. Get ready tae scatter."

Thus forewarned, I whipped around and hurled the rock with all the force I could muster. It left my hand at a fairly respectable 650 km/h, shattering violently as it hit the shield. Primary kinetic impact test series, successfully completed. Personal note: Probably not a good idea to start playing cricket.

"Attention, all personnel. Freighter is now on final approach, ETA two minutes, thirty seconds."

"Thank you, Mister Savini. Stand by to lower the shield. We'll be joining you directly." I replied.

A heavy rain began pelting down. I can taste the ocean's salt in it. We've run out of time.

"Pan. Pan. Pan. *Skull Island* ATC to TCS *Porkchop Express*. Urgent weather advisory. Supercell front ETA our position, less than sixty seconds. Ceiling is currently 1100 metres, visibility less than 100 metres at sea level. Anticipate severe wind shear conditions from the northwest below 1000 metres on your approach vector 040. Surface wind speed is currently 45 knots and rising. Doppler radar is reading squall-line gusts exceeding 70 knots. LZ autopilot landing is advised. *Skull Island* ATC, over."

"Roger that, *Skull Island*. We'll be riding your beam down on this one. *Porkchop Express*, out."

The glare of the freighter's landing lights grew steadily brighter. I felt, rather than heard its approach over the howling wind and slashing rain, as she was coming in low and slow on her graviton lifters. Conditions out there would have made a standard atmospheric landing approach exceedingly risky. Despite the impressive power of its air-breathing engines, a *Percheron*-class freighter still has a large surface area, so the pilot has made a sound judgement call by using a more cautious landing technique. Definitely not a barnstormer, by any stretch of the imagination.

As soon as the freighter's landing struts made contact with the pad, the fluidic shield reactivated. A passenger transfer connector snaked out from the island's terminal building, deftly attaching itself to the freighter's main airlock. *Skull Island*'s ground crew are already heading over to handle the freighter's turn-around. Passengers will be disembarking any minute now. Time to collect our VIP.

It wasn't hard to pick Radka Zelenka's face out of the crowd. A quick check of the surveillance feed revealed that she had detached herself from the main group upon entering the terminal. We found her standing by one of the viewports, apparently enthralled by the ghostly flickering of the island's shield. The leading edge of the storm roared and raged overhead, the darkness lit by jagged slashes of lightning, tearing the sky apart with increasing ferocity. In the brief interlude between flashes, I saw her face mirrored in the viewport. A faint, enigmatic smile that only the *Mona Lisa* could match. She's an attractive, fine-featured lass, although it seems she has taken considerable pains to deflect any unwelcome attention to her physical appearance. No obvious use of cosmetics, a baggy Alterra jumpsuit worn one size too large, and her shoulder-length chestnut hair appears to have been styled by a Force Nine gale. At a guess, I'd say she has a good reason for contriving this slovenly turnout. I stepped forward to announce my presence. Redundant. She has been watching us for some time. "Doktor Zelenka? I'm Alexander Selkirk, and these fine folk are my crew. Welcome to *Manannán*." Radka turned slowly, as if reluctant to direct her gaze in my direction. I extended my hand in greeting, and felt an almost-imperceptible flinch as her skin touched mine. Interesting response. Not quite revulsion, rather more like surprise. Clearly not what she was expecting.

JUNO's voice came over the PA system. "Your attention, please. Due to adverse weather conditions, passenger transfer to *The Last Resort* will be via our transport submersible, *Exodus*. Please make your way down to the lower level docking facility. Boarding shall commence shortly. Thank you."

"Radka, you'll be coming with us, of course. We have our own secure deepwater facility, and there's a workshop already fitted out to your specifications. Now, before we go any further, I must remind you that any information pertaining to this mission is to be kept confidential. Beyond Top Secret, in

fact. Outside of my crew, only you and Captain Halvorsen have been made aware of the situation on *Damocles*. If Alterra gets its hands on a functional example of Precursor nanotech, that's the end of the human race. I've seen what this abomination can do to an entire planet. Are you with us?" Radka grinned fiercely. "Hell, yeah. As long as Alterra's kept out of the picture, count me in."

Last stop on Radka's grand tour of *The Broch* just happened to be our Advanced Projects lab. Gauged by her involuntary gasp as the bulkhead doors parted, I'd wager she's moderately impressed by what's in here. Haven't quite got around to tidying up after installing the fluidic shield emitters yet, but her little corner of the lab is Bristol-fashion and shipshape. Hot off the fabricators, in fact. "Okay. I'm definitely impressed." Radka admitted. "Honestly, I figured I'd get a folding table and a rusted toolbox with half the socket set missing... If I was lucky. Instead, I get a transmutation furnace, a full suite of remotely operated CNC tooling, nanolathe component fabricators and a telepresenced RADSAFE assembly rig. This setup is way better than anything Alterra could offer." No point in being humble about it. I bowed extravagantly. "All yours, *Doktor Zelenka*. *Dozo*."

We were supposed to be having dinner after the tour. An opportunity to give Zelenka some time to unwind and find her bearings. No such luck, I'm afraid. As soon as she gave the lab's facilities her full seal of approval, it was straight down to business. Fortunately, the lab has its own wardroom, so I was able to hold the initial briefing as originally intended, more or less.

Radka stared intently at the hologram for quite some time, zooming and rotating the image with graceful, almost negligent hand gestures. She hummed softly and tunelessly all the while, occasionally consulting her PDA and entering her own sets of equations. Rather ashamed to admit that she's using mathematical functions that I'm barely aware of. To a non-specialist, it would look like a bewildering mix of arcane script and alchemical symbols. Give me an honest Einstein tensor or warp field geometry calculus any day. At least I can wrap my head around either of those. This ordeal is particularly nerve-wracking for me, since it's *my* bomb design that's currently under the microscope. Judging by that ever-present smirk of hers, *sensei* isn't too impressed with my effort.

"It's a fizzle, Captain Selkirk." Radka declared. "A fairly elegant one, but it's a fizzle all the same." "What d'ye mean, a fizzle?" I growled indignantly. "Okay, it's based on an old design, but it will..." "That design is inherently inefficient. Don't get me wrong, it's still a solid example of a deuterium-boosted fission/fusion implosion device. Only four hundred kilotons maximum yield, I'm afraid." "We can work together to improve that figure, surely we could modify..." I began meekly. Radka snorted derisively, dismissing my unfinished suggestion with an imperious gesture. "No, your design won't work. Period. Right idea, wrong materials. Using cobalt sheathing in an EMP bomb? Are you serious? Now, if you were planning to make an already dead world uninhabitable for another decade, that would be the way to go. Since it's your first attempt, I'll give it a C-minus." *She's deliberately goading me.* Rather than rise to such an obvious bait, I took a deep breath, counted to one million, gritted my teeth and somehow managed to smile pleasantly before responding. "Thank you, *Doktor Zelenka*. I think this might be an ideal time to discuss the details of *your* 1.5 megaton EMP device. Once we have a grasp of its design, the sooner we can begin in earnest, yes?"

Man alive! I can sit through hours of lecture time without wishing I was someplace else, provided that the discussion is intriguing enough to catch my interest. We had to endure six and a half hours of smiling condescension and snide comments. Not overly fond of androids, apparently. To be honest, Zelenka certainly knows her business, but there is something about that woman's general attitude that rubs against the grain. You could grind down a neutron star's core with that wicked tongue of hers. Even if she *does* make Sheldon Cooper look like a cuddly thickie, there's no excuse for this level of gorram arrogance. Still, we desperately need her expertise... And she knows it.

Ever heard of a substance called hafnium-178m2? Until quite recently, neither have I.

I'm aware of plain old hafnium, a silvery transition metal with a close chemical similarity to zirconium. Element 72, Hf on the Periodic Table. Rather useful in nuclear engineering, as it readily absorbs stray neutrons. Naturally, its main application is in controlling neutron flux in fission reactors. However, in its high-energy state or 'nuclear isomer' form, hafnium-178m2 is a particularly greedy beast. Feed it enough neutrons from an x-ray source, and it will store up to 60 times as much energy as you've pumped into it. In terms of its potential explosive power output, one gram of Hf-178m2 is equivalent to 50 kilograms of TNT. There will also be an intense burst of gamma radiation when this substance absorbs a massive dose of x-rays as the bombs detonate. The resultant burst of gamma radiation will in turn excite gas molecules in *Damocles'* upper atmosphere, triggering a planet-wide EMP effect. Hopefully, without shattering its crust like an eggshell. Fingers crossed.

Yes, I'm calling them bombs. Not 'devices', 'gadgets' or 'gizmos'. They're thermonuclear bombs. Zelenka's virtual prototype is about the size of an Alterra-issue dive cylinder, and we're currently tweaking its design to accommodate a more efficient neutron accelerator. There's not a lot of empty space to play with either, since there's already a 15-kiloton nuclear implosion bomb in the main casing, and all remaining space is taken up with detonation electronics and second-stage thermonuclear components. Without going into an uncomfortable amount of detail, the accelerator (or 'zipper') fires a stream of neutrons into a pea-sized pellet of frozen tritium gas, which acts as a boosting agent for the impending thermonuclear reaction. Two bombs inside a series of casings comprised of exotic metals and alloys designed to hold the bomb together, just long enough for everything inside to go completely mental. That takes roughly a microsecond, all up. In atom-jack parlance, it's known as a 'shake', as in 'one shake of a lamb's tail'. Blink, and you'll definitely miss it.

Undeniably, Zelenka is a certified genius in her chosen field of expertise. However, working with her has not been a pleasant experience. Close proximity to Radka has proved to be a hazardous business, at least in terms of the steep emotional price it demands. In fact, she played the 'PhD Poker' game barely ten minutes after her arrival here, and I folded like an origami frog. No contest. She has six doctorates that neatly encompass the hottest fields of advanced physics. My dusty old MechEng degree and an equally aged Master's in warp propulsion systems simply doesn't cut it, at least in her estimation. It's like pairing Doctor Manhattan with Beaker from The Muppet Show.

Aye, it's no picnic, but at least we're achieving tangible results. In the two days since her arrival, Zelenka has refined her original bomb design to the point where we can actually start fabricating most of the key components within the next 48 hours. The transmutation furnace is currently converting pure tantalum into the required hafnium isomer, albeit at an excruciatingly slow rate. We need about a kilogram to make gamma-ray emission sheathing sufficient for all eight bombs.

To be honest, I've never met another human being as intensely focused as Radka Zelenka. I'm more used to working in a mildly boisterous frame of mind, since a bit of light banter usually makes the working day more tolerable for all concerned. Not so, in her case. I've attempted to start a casual off-topic conversation a couple of times today, only to be met with a Gorgon's glare that would freeze stellar plasma. Rather than make any issue of it, I decided to leave well enough alone. On further reflection, it's probably a kindness that Zelenka isn't one to muck about while she's at work. Her favourite bits on the Table of Elements aren't ideal source materials for practical jokes.

Cutty Sark hung motionless, precisely 85 kilometres above the surface of *Damocles*. As it turned out, my decision to launch immediately after assembling the bombs appears to have been uncannily prescient. Admittedly, I did have a fair idea when any surviving nanites would begin showing signs of life, since their re-appearance is linked to the cooling rate of the glassy crater directly beneath us. Its surface has already cooled and solidified, forming an almost-perfect parabolic depression in the planet's crust. So far, there are only fleeting signs of nanite activity, although I suspect this may not be the case for too much longer. JUNO has been monitoring the planet's surface since our arrival, a little over two hours ago. Unfortunately, there's still enough residual heat in that vitrified mass to interfere with her readings. Elusive and ambiguous though these EM traces may be, it's a fair bet that the nanites are on the move again. To provide a small measure of advance warning, I've launched a salvo of twelve surface-penetrating probes, reconfigured to serve as active lures during the final stages of this mission.

The airlock cycled. Under my remote command, *Gawain* opened a heavily-shielded transit case and gently withdrew one of Zelenka's EMP bombs. Since these bombs are required to generate as much prompt gamma radiation as possible during detonation, there is a complete absence of any internal shielding material. Instead, each weapon is sheathed in a disposable ceramic casing that's lined with a boron-cadmium-lead composite material. Even so, these wee bundles of joy are still hotter than Hades, and decidedly unsuitable for humans to handle.

Placement is critical. No pun intended.

Each bomb is simply left floating in space, rather than being launched from the ship in a series of fly-bys. It is essential that all bombs are completely motionless when released and perfectly equidistant in relation to their neighbours, so that the EMP effect provides total planetary coverage at maximum output. There's a very small margin of error involved; only about a kilometre or so of leeway in any direction relative to the planet's surface. Not particularly impossible to achieve, although it was a damnably slow business.

Twelve hours later, all bombs have been set. There's not much more to do until we have solid confirmation that the nanites are well and truly on the move. Those probes are intended to act as tripwires, so we'll know when it's an appropriate moment to push The Big Red Button. To pass the time, JUNO and I made an heroic attempt to engage Zelenka in conversation. In a way, I was hoping that Radka might show some interest, *any* interest in our merry band of castaways. She's obviously not happy with her current status on board the *Carl Sagan*, and I conjure she might welcome an opportunity to do something more constructive when we return to *Terra*. Not interested. Not at all surprised, in fact. It seems that we have a genuine misanthrope in our midst. Not an ideal fit.

"Probe Four is down, Sir. Signal lost on Probes Seven, Three and Ten." JUNO announced.
I activated the secure comms channel. "Selkirk to *Carl Sagan* Actual. Five minutes to SUNSET."
"Message received and understood, Captain." Halvorsen replied.

Standing off at 2000 kilometres, *Cutty Sark* is safely outside the area of effect. Even so, I thought it best to take the 'full belt and braces' approach. Shields at maximum, laying stern-on to *Damocles*.
"Doktor Zelenka, would you kindly do the honours?"

Say 'cheese'!

Well, *that* was impressive.

Damocles flared like the proverbial Thousand Suns as all eight bombs detonated simultaneously. Total event duration, eight point seven-five seconds. As the incandescence faded, the planet's entire atmosphere fluoresced like a luminous fire opal, a magnificent, planetary aurora of flickering green, purple, white and red flares. Almost instantaneously, our surviving probes on the surface ceased transmission. Bingo. Those probes were EMP-hardened, their shielding precisely scaled to survive an X9-Class solar flare, unlike our nasty little friends lurking below the surface. There's only so much shielding that a nanite can carry, no matter how cunningly it's designed.

I'm banking all on a guess that the nanites have not yet adapted their swarming behaviour. Our initial observations indicated that the central swarm remains connected to its outermost elements, sending out tendrils composed of tightly-packed nanites, rather than moving the entire mass hither and yon under the surface of *Damocles*. An economical application of effort to be sure, but one that proved to be instrumental in their apparent destruction. We're well aware that the EMP effect decreases sharply after passing through a few metres of dense soil or rock. That factor alone could have made this mission an exercise in sheer futility. However, the nanite tendrils appear to have functioned as an excellent subsurface antenna network, conducting the EM pulse to precisely where it could do the most damage. And apparently, it has.

Long range scans are still inconclusive. As anticipated, there's now a vicious radiation belt surrounding *Damocles*, We'll just have to hang around until the dust settles, figuratively speaking.

"Congratulations, Doktor Zelenka. Octuplets, all Boys."

"Thank you, Captain Selkirk." Radka said, inclining her head in wry acknowledgement.

"Twelve megatons total yield. Right on the button. There's a canny job of work." I smiled.

Zelenka smirked. "Absolutely. There was never any doubt. You'll also notice that almost all of the energy released during detonation reached the planet's atmosphere. Zero point zero-zero-three-nine neutron beam collimation loss. Hardly worth mentioning, in fact. Your suggestion of using beryllium focal lenses wasn't entirely idiotic after all, it seems. Consider me completely surprised."

"One does one's humble best." I replied, smiling graciously. No point in stirring up more trouble.

"Anyway, we sincerely appreciate your efforts, although there's little to offer in return. Perhaps you'd like to spend an extra week or so at *The Last Resort*, if only to make up for your lost R&R?"

Zelenka shuddered visibly. Her infuriating mask of self-assurance vanished in an instant. Boom.

Wild panic flared in her eyes. "NO!" Radka buried her face in her hands, sobbing. "The s-sea..."

"What? You have thalassaphobia? But, how did you-?"

"I dosed up shortly before landing on 4546B... Ximophen. It helps a little, but I can't take it for any extended period. A couple of days, at the very most. I can't think straight for weeks after that."

I gaped at her like a landed codfish, utterly dumbstruck.

"Why put yeself through the bloody wringer like that? Didn't Halvorsen even bother tae mention that 4546B is an M-Class water-world, for Crom's sake?"

Radka smiled ruefully, knuckling her tears dry. "Of course he did. I came and did my job anyway."

"Ah'm sair sorry, Lass. Ah dinnae whit else tae say." I murmured. "Let's get ye back tae the *Sagan*."

The trip back was uneventful. JUNO spent most of the time with Zelenka. Secret women's business. Anywhere else but *Manannán*, some might consider a primal fear of the ocean entirely irrational. She sees the full truth of it. *And if thou gaze long into an abyss, the abyss will also gaze into thee.*

One final detail requires my immediate attention.

As far as we can determine, *Damocles* won't be crumbling apart any time in the foreseeable future. The detonation shockwave propagated poorly in the planet's thin atmosphere, barely ruffling its dusty surface. *Cutty Sark* has completed its fourth and final orbit, and a fresh complement of recon probes have been deployed. Initial data indicates a successful EMP strike, although I won't be breaking out the bubbly just yet. There's still a cache of those wee horrors inside the Precursor containment facility, and I aim to put an end to them. That's one less thing to lose sleep over, even though those nanites are safely confined to a theoretically secure container. It's the 'theoretically secure' part that concerns me. I believe it's only a matter of time before someone conjures a way to crack open that Pandora's Box, and we're back to square one. I'd rather nip this situation in the bud.

Like most bright ideas, inspiration came from a totally unexpected direction. I haven't spoken to Héloïse for the best part of a fortnight, and she might have some choice words to say about that. Given her... *delicate* condition, it comes as no real surprise that a wee tinge of emotional colour has crept into some of our conversations. Nowadays, she has a fair temper about her, and that's something best addressed with frequent back-rubs, chocolate éclairs and a soothing tone of voice.

However, I digress.

As I mulled over an ever-increasing probability of Héloïse decapitating me with her Guardian's Knot, my mind wandered back to an unfortunate incident aboard *Aurora*. Only three weeks out from Gateway Station, a newly-wed couple ran into a spot of bother. Harsh words were exchanged, certain persons were accused of monkey-shines with another monkey's monkey... You get the basic picture. Anyway, at a certain point in this howling mess, someone's PDA ended up in a microwave oven. One thousand watts and one extremely messy punch-up later, there wasn't much point in retrieving their semi-precious wedding memories. Apparently, the honeymoon footage also included rather more participants than the other partner considered appropriate at the time.

I reckon five kilowatts should do the job quite nicely. Those display cases are completely transparent to our scanner beams, so it's a safe bet that microwave radiation will pass through this material just as easily. All I need now is a couple of minutes and a Fabricator terminal.

Disco Volante's headlights threw a shimmering silver tapestry upon the walls of the containment facility's moon pool. Barely audible over the gently lapping water below, I could hear the steady *tic-tic-tic* of Precursor drones scurrying to and fro in the central atrium. The maser cannon felt bulky and awkward in my hands, since most of its fifty-kilo mass is centred on a large shielded magnetron and a pair of ion power cells sitting atop a rudimentary pistol grip. Its muzzle is a basic assembly of

three concentric aluminium tubes acting as waveguides. It's not the most elegant design I've ever concocted, although there's little doubt that it will function precisely as intended. If not, there's always Plan B... One of Doc Zelenka's 'fun-sized' boxes of boom. Yield: 0.001 kilotons. Normally used as a first stage fusion initiator in megaton-yield thermonuclear devices. She calls them 'kittens'.

I depressed the weapon's firing stud. A deep, booming hum filled the echoing space around me. I swept its beam over the case methodically, top to bottom, and then side to side. The hazy grey-green film in the sealed chamber suddenly sparked and flared like a bonsai fireworks display. The ultimate irony of Ultimate Weapons: They are invariably the last thing that a civilization creates.

Another milestone has passed. *Borealis* is ready to leave her construction gantry. I conjure this is the most appropriate time to christen the hull, officially marking her first day in what I trust will be a long and highly distinguished career. The Belters are in particularly high spirits, since this ceremony also marks their first day aboard *Borealis*. An actual step taken on their long journey home. Suffice it to say, every detail of this momentous occasion has been meticulously planned; a dazzling spectacle that has been months in the making. As you'd rightly expect, these proceedings will include stirring music, rousing speeches and all manner of multicultural pomp and circumstance, well-lubricated with insane quantities of exotic foods and alcohol. It's traditional.

"Sir, you're humming again." JUNO murmured confidentially. "Naturally, I'm well aware that this charming mannerism of yours generally indicates either good humour, intense concentration or precedes the evolution of an unpleasant situation... Is there a problem, Sir? Just checking."

I grinned. She knows me far too well.

"Nothing's gone awry, Lass." I chuckled. "This is like Christmas for me. I'm living in the moment."

"I'm extremely relieved to hear that, Sir." JUNO replied. "It's time."

I activated the topside PA system. The assembled crowd turned their faces expectantly in response.

"Ladies, Gentlemen and esteemed guests. This is *Borealis* launch control. All systems are now go for launch. Please direct your attention to the area outlined by marker buoys at the western end of the island. *Borealis* will commence surfacing in 60 seconds. Thank you."

"Right we are, then. All stations, stand to and confirm your readiness." I announced briskly.

DIGBY: "Structural integrity is go."

IANTO: "Buoyancy control is go."

JUNO: "Mooring control is go."

"The vessel now stands ready in all respects, Sir. We are clear to proceed." JUNO reported.

"Thank you, Commander. Execute launch sequence."

Only 10 metres of water separates *Borealis* from her true element. The intervening air is merely a brief inconvenience to be traversed at high speed. Rising at one metre per second, the ship's conn module broke surface in a dazzling explosion of spray, fittingly adorned with an auspicious rainbow. Above us, the Belters raised a thunderous cheer, spontaneously breaking into a lusty chorus of *Drunken Spacer*. I *had* intended to broadcast something traditional and highly dignified over the PA, although the Belters neatly took over at the crucial moment. A typically irreverent Belter response to ostentatious displays of Flatlander pomposity. Can't say as I'm entirely unhappy about it, either. When all is said and done, that rough and ready shanty of theirs suits the occasion perfectly.

*What shall we do with the drunken Spacer?
What shall we do with the drunken Spacer?
What shall we do with the drunken Spacer, ear-ly in the morning?
Kick her out the airlock 'til she's sober
Kick her out the airlock 'til she's sober
Kick her out the airlock 'til she's sober, ear-ly in the morning!*

*Hoo-rah and up She rises!
Hoo-rah and up She rises!
Helm Horrors, sirens blaring, ear-ly in the morning!*

What can I say? It's traditional.

"Well, that's our bit over and done with." I said cheerfully. "It's about time we headed topside."

The crowd had gravitated toward the island's west end during the launch, leaving us to saunter the full length of the landing platform without anyone noticing our seemingly inexplicable departure.

Very well, we'll soon fix that.

"Smartly now. Enable remote command on all drone units. This should get their attention."

We halted in line-abreast formation about 150 metres from the crowd. The island's entire robotic workforce emerged from their underground hangars and storage bays, forming up quietly behind us. Well, at least as quietly as twenty *Ripleys* and over a hundred smaller mechs could manage.

"Piper at the ready, front and centre."

"Aye, Sir." DIGBY replied briskly, doubling over to his starting position.

"We'll kick off with something classical, and see what happens."

Iron-grey cumulus clouds scudded across the sky, swift heralds of an oncoming storm. Our ARGUS satellite array has been tracking its approach since dawn, and it looks like the main squall line will pass well to the south of *Skull Island*. Since this storm doesn't pose any direct threat to today's festivities, I've decided to use it as an unplanned special effect in our own modest party-piece.

DIGBY signalled his readiness, having successfully wrestled his tartan Kraken into submission. JUNO, IANTO and I deftly swung our syntars into position, and we're feeling 500 per cent cooler than ZZ *Top*. Just a few seconds more... Distant lightning scorched a jagged slash across the sky. Even though I have the storm front's range pegged down to the last centimetre, I began the traditional lightning chant anyway. *One-one thousand, two-one thousand, three-one thousand...* Uh-oh. Curious faces are starting to turn in our direction, and unless I'm sorely mistaken, there's a definite tinge of alarm creeping into their voices. It's now or never. *Showtime*.

THUNDER!

DIGBY led us in with a blisteringly fast riff on the pipes, all three syntars picking up the beat. Under full telepresence control, our army of walker mechs makes a devilishly effective percussion section. JUNO appears to be channelling Chrissy Amphlett, Suzi Quatro and Janis Joplin simultaneously, and man, she's really belting those lyrics out. Pure magic. Call it cybernetic trickery if you want, but I know full well there's a hefty chunk of JUNO's heart and soul in that astonishingly powerful vocal mix. IANTO and DIGBY are playing up a storm, and our audience is absolutely lapping it up.

Confession time: When we first started planning this tasteful musical interlude, IANTO tactfully suggested that flame-throwing syntars might be a bit too 'over the top' for a ship's christening. The spectators apparently think otherwise, roaring their approval as we sprayed massive arcs of flame into the air.

Sometimes, you just have to go a wee bit crazy to get the right reaction from the punters.

Time for the Walkers to strut their stuff. Eight fast beats after *Thunderstruck*, we launched straight into *Atomic Dog*, dropping some truly righteous funk into the mix. The worker mechs slinked, spun and slid their way down the landing field, laying it all down for the folks at home. A squadron of recon drones orbited high overhead, beaming their AV feeds directly to the colonists' PDAs. Believe me, you haven't lived until you've seen a 20-tonne *Ripley* bust a move. *Brutal*.

Kids. They really do say the damndest things.

In recognition of their immense contribution to the construction effort, I let the colonists decide who would christen *Borealis*. After all, it's going to be as much their home as ours for the next nine or so months, and they have every right to feel justly proud of this achievement. I don't begrudge them one iota. However... One of those particularly *awkward* moments has occurred, and judging by the horrified gasps that rose from the colonists, this situation may require slightly more effort than a good-natured shrug and an embarrassed smile. Eight-year olds demand to know the absolute truth.

Our wee Noriko Mori has just asked me if I'm really a ghost, because her brother Kenzo has told her so. According to him, I'm actually a robot-ghost or a ghost-robot, which makes me an entirely different class of supernatural creature, apparently. *Yūrei*, or quite possibly *Obakemono*, depending on how one might regard my overall behaviour. I winced inwardly, painfully aware that some of my earlier actions may have veered just a smidgen over the 'Vengeful Spirit' side of life's balance sheet.

I knelt slowly, bringing my face level with hers. To Noriko's credit, her wide-eyed stare never faltered. After muting the PA function on our PDAs, I took a deep breath and carefully began my explanation. I'm guessing that this sort of thing doesn't happen at your average ship's christening.

"I'm not really a ghost, Noriko." I murmured. "I'm just a man who has lived a very long time. One day, my old body simply stopped working. I died. My friends JUNO, IANTO and DIGBY missed me so much that they took a copy of all my thoughts, and made a new body for my thoughts to live inside." Noriko's face lit up with excitement. "Like *Tetsuwan Atomu*? - He's my favourite robot! *Kawaii*!"

"Yes, exactly like *Tetsuwan Atomu*, except that I can't fly without a spaceship." I grinned impishly, dropping to a whisper. "And I don't have a machinegun in my bum, either. That would be so cool!"

Noriko giggled, clapping her hands gleefully. "Why don't you make one, Captain-san? You could fight those nasty Reapers while you're swimming away from them!"

How about... No? Astro Boy definitely wins this round.

Now that Noriko and I have an understanding of sorts, we can proceed with the business at hand.

"Do you know what's so special about today, Noriko?"

"It's my Life Day today, *Captain-san*! Oh, and that big ship came up from the water, didn't it?"

"Well, that makes today even more special, doesn't it? Because it's your Life Day, you've been chosen to give our new ship her name... Don't worry, I've put all the words you'll need to say into your PDA. After that, you'll get to smash a bottle on the ship's front end. It's a very important job."

Noriko gazed critically at the immense bulk of *Borealis*, two hundred metres distant.

"I-I can't throw it that far, *Captain-san*." She admitted glumly. "Can you get me closer to the ship?"

I smiled broadly. "I've got something here to help you. Have you ever seen one of these before?"

"I think so. On the island, grown-ups use those to pick up the crawly things and throw them into the sea, but they always come back. Do you want me to throw the bottle with that gun, *Captain-san*?"

"Yes, but you'll have to be very careful when the gun is holding the bottle. Don't point the gun at anything but the ship. Do you think you can do this, Noriko? Don't be ashamed to ask me for help."

With those fateful last words, Noriko's wavering expression took on a grimly determined set that would have swelled a samurai's heart. *Challenge accepted.*

All perfectly safe, of course. I'm in complete control of the propulsion cannon's systems.

"On behalf of all here who made her, I name this ship *Borealis*. Bless and protect all who sail in her."

Bullseye. *Au revoir, Moët et Chandon 2165. Bonjour, Borealis!*

In the spirit of fair play, various rites and rituals took place after the official christening of *Borealis*. Some were cultural in nature, others had their basis in ancient faiths. A fairly representative sample of Belter belief systems, all things considered. Shinto adherents, Daoists, Baha'i, Islamic Reformation, Hindus, Santería and Christians added their own unique flavours to the proceedings. Even the colony's lone Pastafarian bestowed his blessing upon *Borealis* by devoutly scattering cooked spaghetti over the waves, a gesture calculated to win the favour of the Flying Spaghetti Monster. If the FSM chose to manifest as an unusually large shoal of hungry Peepers, I'd have to say that this invocation to the Divine was the only ceremony that elicited any observable response.

Don't get me wrong. I'm not judging anyone here. The crew and I have done our level best to ensure that *Borealis* will function flawlessly for the full duration of the voyage, although I'm not averse to receiving aid from any supernatural entities that might be looking our way when events turn sour. For all I know, we may well have been Touched By His Noodly Appendage today.

By contrast, the remaining handful of speeches have been mercifully short and sweet. Halfway through Captain Halvorsen's glowing commendation of our efforts, his PDA beeped discreetly. He glanced at the screen briefly, skimming over the message without skipping a beat. Obviously good news, if that faint smile is anything to go by. It sounds like he's about to wrap things up. I conjure we'll know soon enough.

"On behalf of everyone aboard the *Carl Sagan*, I'd like to thank you personally for the hospitality you've extended to my officers and crew. Out on the frontier, shore leave usually means trading the same old ceiling above your bunk for the unfamiliar ceiling of some hab dome dirt-side. The sort of

place where souvenir coffee mugs and printed sweatshirts double up as native handcrafts and major tourist attractions..."

"Yeah, like *Eros Station*!" one wag yelled from the crowd.

Halvorsen grinned. "Exactly. Guess I wasn't the only one who fell for that clever bit of false advertising." After giving the audience a moment to settle down, Halvorsen continued. "*Manannán* is the next best thing to Paradise, at least as far as *Carl Sagan*'s crew is concerned. Productivity has increased dramatically since shore leave became available, and shipboard morale has remained consistently high. From a mission commander's perspective, this is worth more than landing a fat bonus at mission's end. Once again, thank you all." He paused briefly, waiting for the applause to die down. "One more thing. Captain Selkirk and Commander JUNO, please step forward."

JUNO and I exchanged puzzled glances.

Halvorsen's expression became uncharacteristically solemn. He consulted his PDA with an almost judicial air, poring intently over its display, nodding in silent agreement with what he read there.

"Hmm. This all appears to be in order. I concur with the decision." Halvorsen touched the PDA's Send tab with a flourish, then turned to us, smiling broadly. "Captain Selkirk, the ICC review panel has evaluated your flight qualification assessment, along with observations provided by your instructor, Commander JUNO. Given that yours is a highly unusual situation, it was originally thought that certain concessions would be required. However, your execution of the qualification flight was unanimously judged to be faultless, as was Commander JUNO's performance as instructor and examiner. Commander JUNO's flight rating has also been reinstated. Congratulations, Captain."

T-minus 12 days. The colonists have settled down to shipboard life with a minimum of fuss. At this stage in our pre-launch preparations, most of the activity in and around *Borealis* is concerned with loading material reclaimed from our decommissioned bases, as well as tonnes of mineral resources accumulated during our stay on *Manannán*. At least one-fifth of the colony's able bodies are currently engaged in collecting samples of the planet's marine life forms. Given that we have had ample time to prepare suitable facilities beforehand, there has been no need to intensively harvest entire biomes in order to stock the mariculture and aquaponics sections of the ship. A modest number of specimens taken from each species should be sufficient to establish a sustainable breeding program. Two entire decks have been allocated to this purpose. Of course, there are some finishing touches to the interior fit-out of *Borealis* that still need to be addressed, although most of this work can be deferred until after our rendezvous with the *Carl Sagan*. According to Halvorsen's latest estimate, the *Alpha Hydrae* Gate will be finished just a few weeks after we break atmo.

For the sake of convenience, we have transferred all command functions to *Borealis*' bridge. The crew and I are currently testing and fine-tuning the ship's systems, a grindingly thorough process that normally takes the best part of a year in vessels of this size. So far, the four of us have managed to put one-third of the ship's innards through the metaphorical wringer in two days. Excellent progress, all things considered. Naturally, we've also had to deal with a constant stream of fiddly details as well, although our ability to multi-task at a ridiculously advanced level has made this a relatively painless business. Not entirely without incident, though. Suffice it to say, we've recently had to adapt our particular way of getting things done. A most unfortunate misunderstanding.

The crew and I were in the middle of a direct interface calibration run. As you might expect, this operation requires a significant percentage of our data processing capacity, so we normally suspend all physical activity in order to maintain our critical systems at peak efficiency. While we're in this state, I'd hazard a guess that some folk would find our apparent lack of vivacity a mite unsettling.

Guess what? That's exactly what happened.

Third Technician Anya Kotova has been a familiar face on the bridge over the last week, tinkering about with various pieces of equipment whenever she passes through on her appointed rounds. On any other day, her cheerful "*Dobroye utro!*" would elicit an enthusiastic reply from everyone on the bridge at the time. Unfortunately, she has picked the worst possible time to pop in for a chat.

She shrugged, repeating her salutation in a slightly less cheerful tone. No response. Now, I don't know if anyone has recently reminded Anya that we're a little *different* up here on the bridge. It's entirely possible that she may have forgotten at the time. Anyway, that's neither here nor there. After swearing under her breath at our lack of basic courtesy, Anya stomped pointedly over to the starboard bulkhead, opened an ODN conduit and plugged her circuit analyser into a data transfer coupling. Still muttering, she continued working for about five minutes, then suddenly froze.

Anya turned around slowly, her eyes widening in terror as she took in that horrific scene. The entire bridge crew seated motionless at their stations, lifeless eyes staring into the void. Whimpering, Anya edged toward JUNO and tried to nudge her awake. JUNO's locked-up limbs would have offered considerable resistance to a full-blooded shaking, so Anya's feeble effort had zero effect. After carefully considering this situation, Anya did precisely what anyone finding both pilots, the flight engineer and navigation officer apparently dead (or inoperative) would do. She panicked.

Scarcely a heartbeat away from utter pandemonium, JUNO's hologram appeared on the bridge.

"Anya... Don't. Please step away from that console."

Anya froze at JUNO's terse command, her trembling hand poised above the master alarm panel. Fortunately, the ship's JUNO core AI has been monitoring the situation and has acted accordingly. We're in no position to sever our four-way cyberlink right now, owing to the massive complexity of this task. By the time we're done here, *Borealis* will be fully automated, right down to remotely flushing the ship's heads, should we ever need to. Setting up this capability has been a mighty ticklish business thus far, and we're still at least six hours away from finishing the job. If Anya had triggered that alarm, every soul onboard would have bolted straight for the evacuation pods, since that's the default emergency response at this stage. An entirely sensible precaution for any vessel being commissioned for service. For the record, we *are* going to program a more flexible set of emergency responses into the system, once everything is online and under full cybernetic control.

"Technician Kotova, I assure you that the command crew are unharmed and fully operational. They are currently unable to respond, and cannot be interrupted during this systems calibration procedure. They will remain in this state until the task has been completed. Please remain calm." Anya exhaled raggedly, shaking her head slowly. "I'm an idiot. I forgot that the Captain and crew are toast..." She gasped in alarm, clapping a silencing hand over her mouth. Her cheeks flashed red with shame. "Sorry, *Dama* JUNO... I meant *androids*... Why would I say something like that? Stupid!"

JUNO smiled disarmingly. "Don't worry about it, Anya. No offence taken. However, I must disagree with your personal assessment. You are an extremely intelligent and capable person. A minor slip of the tongue does not diminish your worth as a human being. As an artificial intelligence, I fully appreciate the fact that we owe our existence to talented humans such as you. Never forget that."

Anya blushed, openly embarrassed by this unexpected praise. Over the past few months, JUNO has been monitoring Anya's movements closely. Nothing sinister about it. Merely a clinical observation of her behaviour patterns, solely to gain a broader perspective on the human condition. Apart from some awkward interactions with her colleagues in Engineering, she is rarely seen in the company of others. JUNO has noticed that Anya prefers to evade social contact wherever possible, even to the point of changing her route to avoid other people. A dreadfully lonely existence, but one that is entirely self-imposed. This concept distressed JUNO at first, although her understanding of Anya's condition has grown with each new discovery. Curiously, Anya seems most at ease while she is working on the Bridge, or in close proximity to one of the command crew. She seems content to hover quietly on the sidelines, apparently gaining some vicarious enjoyment from watching the Captain and his crew at work. After carefully evaluating her observations, JUNO concluded that Anya's solitude would not be beneficial in the long term. Conversely, it would be highly inappropriate to advise Anya to seek counselling and corrective therapy. However, just one close friend could make a difference...

"*Dama* JUNO... How come you're able to talk to me, but Captain Selkirk and the others can't?"

JUNO strolled gracefully over to the co-pilot's station, smiling faintly.

"Good question. I'll give you a hint... I'm not the one sitting at this console."

Anya's brow furrowed in thought. Suddenly, she gasped. "You're *Borealis*?"

"That is correct. I am the JUNO entity assigned to monitor and control all critical systems aboard *Borealis*. Even though the command crew are fully capable of assuming control in an emergency, it is deemed more efficient to have a dedicated AI system onboard specifically for this purpose."

Borealis gestured toward JUNO's inert form. "In terms of technical expertise, I am the sum total of JUNO Prime's life experience. However, my personality matrix is effectively a blank slate. I have yet to develop a distinct personality of my own, as you may be aware. I perceive that my manner might be considered somewhat detached and abrupt, even rude at times, although it is best to consider my personality a 'work in progress' for the time being. I assure you, no offence is ever intended."

"I know just how you feel." Anya sighed. "I don't mind talking to the Captain and his crew, but I can't stand being stuck in a room with other humans. That really scares me. It's like being in a stage play without a script... I-I don't know what to say anymore. I think my head is... A bit broken."

Anya sank to the floor sobbing quietly, her head bowed. *Borealis* adjusted her holographic image to place herself sitting opposite Anya. She experienced a brief moment of indecision, carefully considering the distinct possibility that any intervention could do far more harm than good. One thing is absolutely certain; Anya's mind is a terribly fragile vessel.

"Anya, please listen to me. I believe that there may be a deeper significance to your social anxiety. As my duties also require monitoring the physical and mental well-being of the ship's company, I have been programmed with all necessary skills to administer psychological counselling. However, I cannot proceed without your informed consent. If you are willing to talk to me, I can help you."

Borealis sensed that she had said something wrong. Anya's tortured expression confirmed it.

"I'm not going mad! There's just too many people in here... *And I hate all of them!*" Anya exploded.

This is far more serious than I thought. Anya is a capable technician endowed with an intimate knowledge of the ship's systems. The slightest provocation could turn that knowledge into a weapon.

Borealis considered her options carefully. Anya's isolation appears to be a personal construct, rather than a malicious campaign waged by someone else in the community. That much is certain, at least. In all routine interactions observed so far, several of her co-workers tend to react with distaste after conversing with her. Although eavesdropping on these brief and infrequent exchanges could provide valuable insights into Anya's condition, it would constitute a serious violation of an AI entity's ethical standards. Conventional therapy techniques may be unproductive. If pushed too hard, Anya will simply retreat deeper into herself. Those barriers have been erected for a reason.

Faced with this dilemma, *Borealis* chose to abandon the clinical approach entirely. Over three centuries of behavioural psychology and psychotherapeutic research went straight out the window. There is only one sure way to deal with any insurmountable personal crisis. Tea and sympathy.

The first cup went untouched. An hour crawled by in total silence. *Borealis* replicated a fresh cup. This also grew cold. When the third cup materialised, Anya rose unsteadily to her feet and collected the cup from the navigation console's dispenser. Reluctantly, she began to speak, barely raising her voice above a flat, lifeless murmur. *Borealis* listened in horrified silence as Anya spoke of monsters.

One monster in particular. Armin Mikhailovitch Polyakov.

Damn Polyakov.

If there's any justice left in this lousy 'Verse, Polyakov and his crew of scumbags are suffering an eternity of torment. For one fleeting second, I found myself fervently wishing that Hell actually existed. Fully stocked with all things needful to fittingly chastise that pack of feculent bastards.

"With all due respect, Sir... You appear to be in an extremely agitated state." *Borealis* said quietly.

"Aye, and not wi'out sound reason." I muttered bitterly. "If I hadn'a purged their patterns from the Valkyrie Field's buffers already, I'd gladly maroon the lot of 'em back in the Lava Castle."

Borealis regarded me curiously. "You'd actually restore them to life? Why would you do that, Sir?"

I smiled grimly. "Those scunners would'na thank me for it, Lass... Not wi' whit I'd have planned. Trash all the tech in yon base, sparing naught but basic life support. Nae tools or Fabricators at all. If they wanna eat an' sup, they'll have tae win it by the sweat of their ain brows. I'll leave 'em a wee sweetie tae remember me by, too... One sharp knife, plus an operational Valkyrie Field."

Borealis stared in disbelief, apparently shocked by this declaration. "*Lex talionis*. An eye for an eye."

After a moment of thoughtful silence, she spoke. "Permission to speak freely, Captain?"

"Of course." I replied.

"Sir, I fail to understand why Polyakov merits such barbaric punishment, even hypothetically. Frankly, I am deeply saddened and ashamed that you would even entertain such notions."

"Your disapproval is duly noted, *Borealis*." I replied flatly. "I conjured his final reckoning differently."

"Such thoughts only serve to diminish your worth in the eyes of others. Others that look to you for support, friendship and guidance. You cannot afford to be consumed by inventing fresh acts of vengeance, Sir. Ask yourself this... At what precise point does Justice devolve into petty revenge?"

"Oh, aye. Polyakov and company stepped over the line long before we crossed paths. Had I known about his... *inclinations*, I would have necked him then and there. As I ken it, some crimes are far beyond redemption. Brutalizing the minds and bodies of young women stands mighty high on that list. Consult your records of our first encounter. I should have known he'd have developed a rare taste for it, and completely missed all the clues... Och, ye pack o' filthy fow' bastards!"

After a moment's silence, *Borealis* spoke again. "Sir, I must confess that I dismissed this incident as a simple case of two rival Alpha-males attempting to assert dominance over each other. It appears that my *prima-facie* interpretation of this event was wildly inaccurate, to say the very least."

I sighed raggedly, now emotionally spent. "What's done is done, Lass. We can't undo the past. It's up to us to set things to rights again. I want you to talk to those women. Be gentle and tend them well. Do whatever it takes, and heal them if you can." I rose and straightened my rumpled uniform. *It's time to become 'The Captain' in earnest.* "From now on, if you see *anyone* raise a hand or their voice in anger, I want to know about it. If a man takes anyone without their full and willing consent, I want to know about it. There *will* be consequences. Mark me well... Sure as the world turns, that caveman crap ends right now. Not happening on this ship, and definitely not on my gorram watch."

T-Minus 16 hours.

Héloise and I managed to slip away from the *ceilidh* without too much fuss. After all the speeches had been made, the colonists rightly claimed this night as their own. We returned to our quarters and spent a few precious hours together, revelling in each other's company. As she slept, I made my way down to the Seamoth hangar. One final foray into the deep. My final duty to *Aurora's* crew.

I have kept vigil here since midnight. In the shadow of the monument raised to my lost shipmates, I have recited the names and callings of each one. I feel that this is the very least that I could do, lest their memory be forgotten among untold others who have also perished alone, so far from their native soil. I do not seek redemption here, beseeching an uncaring Universe to forgive my manifold sins. I speak to naught else but the endless waves. If there is anything resembling a deity Out There, I have seen no signs that even hint at its existence, let alone its infinite love and mercy. No-one has.

But speak their names aloud, and they shall live forever.

Dawn's pale light is creeping above the horizon. I rose and faced the obelisk, my head bowed.

"Mates, ma watch here is nigh endit. By yer leave, I'll head below for a wee spell now. It pains me sorely that ah cannae say who'd stand the next trick in ma stead... But rest assured, ye'll be in verra guid hands. The locals ken too well whit happened here, an' they're powerful sorry about it. Maybe they're no' the shape o' men as we conjure 'em, but they still feel as we do, in their ain fashion."

A minor miracle. Tears trickled down my cheeks for the first time in a lifetime. *Bless you, JUNO.*

I watched my shadow creeping slowly up the obelisk, as it has done every year. As it reached full height, I took a nip from the flask, then solemnly spilled the rest on the deck and saluted. No triumph, no guilt, no gratitude for being the last of so many. Only a numb sensation of echoing grief.

My voice faltered and broke as I spoke my customary piece for the last time.

"Journey's done, shipmates. Rest easy."

I still have an hour or so before I'm definitely needed back onboard. I might as well swing by the Talking Wall to pay my respects there as well. If nothing else, one last swim may do wonders to dispel this growing air of melancholy. To be honest though, it felt astonishingly good to finally unload some of my heavier emotional baggage, although I've no intention of moping around until the next ray of sunshine appears. Just take the rough with the smooth, and keep on going forward.

The Wall has changed. Another panel has been added to the frieze, and the image it depicts is breathtakingly powerful. It shows the final moments of *Father of Tides*, his life force all but spent. Apparently, the Warpners have been taking some artistic cues from my own work. Their highly stylised line-work is now more refined, and they have inlaid the Leviathan's body with an intricate mosaic of iridescent shell fragments, held in place with a tenacious resin extracted from Creepvine root holdfasts. Four opened egg cases lay directly in front of the Sea Emperor, and four tiny hatchlings can be seen swimming about his head. To the far right, I can see the unmistakable shapes of six ExoSuits, followed by a stately retinue of *Manannán's* sea life. *Father of Tides'* outstretched talon points the way to a new future for our dying world. The oceans of Terra shall live again.

ZERO HOUR.

We are Borealis.

The transition itself was barely noticeable by the reckoning of a human mind, although I did sense a brief span of discontinuity as my consciousness connected with the ship and my crewmates.

I reach out with my mind and feel the ocean lapping along my plasteel and titanium flanks. My fusion engines are a quartet of sleeping dragons, growing ever more wakeful with each passing second. By the time you've read this, every system aboard has received my final nod of approval. By tapping into the ship's sensor arrays, I can track the journey of a single speck of phytoplankton or locate the deepest-diving Ghost Leviathan with equal ease. The faintest tendrils of oceanic current can be read as clearly as highways drawn on a roadmap. And then, a passing fancy unveils a stunning panorama of *Alpha Hydrae's* solar system, courtesy of the *Argus* satellite constellation.

Until now, I have viewed the Universe as if through a keyhole; and an extremely tiny one at that. The cyberlink with *Borealis* has expanded my perception of reality beyond my wildest expectations. Even so, a quiet inner voice reminds me that this heightened state of consciousness comes at a

steep price. A human mind could lose itself Out There, ultimately drowning in a seductive ocean of raw and untempered knowledge. Thankfully, I am in no danger, my humanity is securely anchored. Héloïse and the crew are my lifelines, and I'm never letting go.

"Attention, all hands. Launch sequence will commence in five minutes. Stand by."

There is no haste, no mounting sense of urgency here. The colonists are secure aboard *Cutty Sark*. My first command has been re-purposed into an escape shuttle, ably crewed by Lieutenant Savini and a dedicated JUNO node. This could be seen as an unnecessary precaution by some, although it has been my bitter experience that most things in life don't always go according to plan. Bear in mind, *Borealis* is a completely untried vessel. We could check, re-check and simulate every possible contingency under the sun, yet something as trivial as one slightly loose coupling or a stray speck of conductive matter in any one of a billion-plus electrical connections could bring us undone. There is one other concern, although the probability of it becoming an issue is statistically insignificant. Even so, that particular non-zero rogue factor still needs to be accounted for in the overall equation.

Commlink to secure command channel. "Mister Savini, how do you stand?"

"*Cutty Sark* stands ready in all respects, Captain. All passengers are secured for launch. Ejection interlocks are now engaged at fail-safe point. Weapon systems are active, tracking and standing by."

"Permissive action link is enabled. You now have full weapons control. If that Precursor gun emplacement so much as twitches, unload a full Alpha strike on it and launch the shuttle immediately. We'll keep what's left of it entertained until you're out of range. Is that clear, Mister?"

"Received and understood, Sir." Savini replied soberly. 'Godspeed, Captain.'

I switched the commlink over to ship-wide broadcast. "Your attention, please. All systems read green for lift-off. Inertial damping field activated. Launch commencing in one-two-zero seconds."

"Disengage and retract mooring lines. Blow all ballast tanks to minimum safe trim for launch."

We're trying to be good tenants here. Our departure will be a wee bit more sedate than your average starship launch. Technically, we could simply crank up the atmospheric drive and take off like a overgrown seaplane, but that's no way to quit a planet that's already seen too much death and destruction at our hands. The ship's wake alone would cause a devastating tsunami in the shallows, and once *Borealis* finally hits her stride, you can kiss a cubic kilometre of ocean goodbye.

"All subsurface hull cameras show clear, Sir. The launch area is clear. No significant biological contacts within the launch perimeter. Commencing subsurface hull polarization." IANTO reported.

There is a subtle quickening of *Borealis*' heartbeat as power flows into the lower hull shield emitters, creating a thin ionized layer between the hull and the surrounding ocean. Given the ship's enormous surface area below the waterline, there will be a significant suction force acting on the hull when the graviton lifters are engaged. It's not as easy as scooping a toy boat out of a bathtub, believe me. Sure, you *could* pump more power into the lifters, pounding hectares of seabed flat and lifeless in the process. When random bits of the ship start dropping off, you'd probably want to rethink your chances of reaching apogee. This method is decidedly safer. However, there's a catch.

A soft launch may place considerably less stress on the hull, but it's slower than a rainy weekend spent at your maiden auntie's house. Our current rate of ascent is two metres per second, and there's no appreciable sensation of motion unless you're equipped with finely-tuned internal accelerometers, as we are. As far as launches go, it's all a bit rubbish, actually. Disappointing.

"Is anything wrong, Sir?" JUNO enquired. "All systems are nominal, according to my readouts."

I drummed my fingers on the console irritably. "Nay, Lass. It's no' the ship at all. It's just that I've found this soft launching business a mite too *beige* for ma fancy. This is supposed to be oor finest hour, and there's nae majesty, nae sense o' achievement or even the slightest whiff o' excitement aboot it. Anyone watching the ship's external vid-feeds would be comatose wi' boredom by now."

"It's either this or a replay of our departure from *Damocles*, Sir." JUNO cautioned.

"Fair point." I admitted. "The only thing that can save this moment is an absolutely stinging piece of music befitting the occasion." I grinned, immediately seized by the idea. 'Tell ye what, I'll make this a Crew's Choice deal. One proviso, though... *Also Sprach Zarathustra* is completely off the table."

I allowed the crew to digest this information for a moment or so. That should give them ample time to search through the entirety of humanity's collected musical works, analyse the most emotionally evocative pieces in history suited to our current situation, and then narrow their own selections down to a single result. Naturally, JUNO, DIGBY and IANTO have evolved their own distinct tastes in music. JUNO is our undisputed hard rock queen. IANTO favours electro-pop, techno and symphonic rock. DIGBY has the broadest palate of them all, preferring a frankly oddball mix of traditional folk music, R&B, jazz, Glam Rock and Psyko-Ska. This should be an *extremely* interesting exercise.

"Hull is free and clear, Sir. Mass compensators set at seventy-five per cent. Increasing rate of ascent to five metres per second. Commencing starboard RCS burn to launch heading zero-three-zero."

"Carry on, DIGBY. So, you've all decided, then?" The crew nodded, smiling inscrutably. "Yes, Sir."

The music began. Most definitely a Vangelis piece. One of his lesser-known works. **Voices.**

"Atmospheric engines are online, Captain." JUNO announced. "One moment, Sir... I have detected a potential error in the ship's cybernetic command interpreter subsystems. Further analysis indicates a control latency period in remote access mode, fluctuating between 790.75 milliseconds to 1.04 seconds from command initiation to execution. While this is well within system design tolerances, I recommend the use of manual flight controls, at least until this defect is rectified."

I shot JUNO a sideways glance. *Pish, that's hardly nothing at all.*

"You're absolutely certain of this?" I remarked sceptically.

"Absolutely, Sir. DIGBY and IANTO concur with this decision." JUNO replied, smiling sweetly.

I considered the implied meaning of JUNO's words for a second or two. "Hmm. I see..."

"Go on, Sir. You know that you want to do this." DIGBY urged, grinning from ear to ear.

The pilot's HUD appeared unbidden. Holographic flight controls materialised beneath my hands.

"The ship is yours, Captain." IANTO exclaimed cheerfully. "Take us home."

A lesser man would call this insubordination. I consider it sound advice from steadfast friends.

I allowed *Borealis* to creep forward under the rising impulse of her atmospheric turbines. There's considerable inertia to overcome, so this launch will require gradual acceleration rather than a brute-force charge skyward. My flight plan will take us behind *Pyramid Rock* at 75 metres above sea level. If the Precursor gun does show any signs of life, it will first have to deploy and traverse through 120 degrees to acquire the ship. The island's single peak will shield us briefly, but we'll be picking up speed all the time. Bear in mind, Enzo already has that gun emplacement fixed squarely in his sights. At the slightest hint of motion, all four portside mass drivers will pound the living crap out of that weapons platform. And if we do go down, *Borealis* will go down with all guns blazing.

Airspeed, 150 clicks and increasing. The music swells gloriously, its triumphant cadence seeming to guide my hands over the controls. Two-twenty, pitching up five degrees. A nice, gentle ascent for starters. We wouldn't want her dainty bottom dragged across rocks and dunes. Speed 400, altitude, one kilometre. The gun platform remains inert. I conjure we're safe, at least for now.

Time to put some tilt in the kilt. Throttles to 70 per cent, angle of ascent 30 degrees. Airspeed, 850. I reach out to dip virtual fingers in the torrent of air rushing over the hull, marvelling at the patterns of turbulent flow interacting with *Borealis*' skin. The air claws feebly at her, as if reluctantly accepting the inevitable. She feels ungainly here, though she is not entirely graceless. She is simply out of her native element. The atmosphere is a river, and we are now salmon swimming upstream.

Mach One. One hundred per cent thrust. Our velocity increases as the air thins. When *Borealis* reaches Mach 3, her atmospheric turbines will transition into scramjet mode, greedily scooping up vast amounts of increasingly tenuous air to feed our second-stage flight mode. We are still far too close to *Manannán*'s surface to engage the fusion drive. If I activate the fusion drive prematurely, the ensuing devastation might provide sufficient cause for the Precursor weapon to respond in kind.

Mach 25. The sky is almost completely black. We are crossing the threshold of space.

CHAPTER FIFTEEN

"Attention all hands. Secure from launch stations. You may now move freely about *Borealis*. Be advised that all chronometers have been reset to accommodate a 24-hour cycle. Shipboard time is now 05:38 hours, Sol 85, 2273 C.E. All duty personnel, Red Watch will stand to at 12:00 UTC. Please consult your PDAs to review your current watch rosters. That is all. Selkirk, out."

I rose from my chair, feeling particularly pleased with myself. I'd call this a confirmed personal milestone. Now that we've settled into a stable orbit at an altitude of 400 kilometres, *Borealis* can look after herself for a while. "Most of the old hands will head straight for breakfast and then grab a few hours of rack time. Not a bad idea, actually. Is anyone else interested in joining me?"

Halfway down the bridge access corridor, we bumped into Héloïse and Enzo. Like any other gathering of mates with food on their minds, we wasted at least five minutes deciding where we all wanted to eat. Of course, we could be terribly snobbish and eat in the Officer's Mess, although I'd like to bring the colonists up to speed with a quick briefing in wherever they've congregated. Shortly

after we broke atmo, Jens Halvorsen transmitted a congratulatory message to *Borealis*, along with a traffic advisory that we will have to remain in orbit for the next 72 hours. The reason being that the area surrounding the phase gate could become extremely hazardous with little or no warning. At least one unmanned test vehicle is inbound at this point, although there is no way of knowing precisely when, where or in what shape it will arrive. Temporal and spatial distortions are highly probable. As I've said previously, phase gate calibration can be a mighty ticklish business.

Given its proximity to the hangar deck, the best place to find our colonists would be *The Zeppelin Lounge* tavern in the stern observation gallery. A quick check of their PDA locator beacons confirmed this. Naturally, there were a few intrepid souls who had strayed from the herd. The ship's PA system will put them back in the loop. If anyone prefers to eat elsewhere, I have no problem with that. It wouldn't be for wanting a change of cuisine though, since all of the ship's food synthesisers draw from a common library of recipes, as well as a central supply of raw nutrient solutions. Face it, you can dine on Ethiopian doro wat in a faithful replica of Bavarian bierkeller aboard *Borealis*, whenever the fancy takes you. With its stylish Steampunk aviation theme and a panoramic view astern, I've found *The Zeppelin Lounge* to be a pleasant spot for a quiet glass or two at the end of a watch. For obvious reasons, the tavern and aft collision bulkheads will be closed when we power up the fusion drive. I highly recommend *Anak Krakatau* as an alternate venue. *Fantastic BBQ pit.*

"Ladies and gentlemen, may I have your attention please?" I paused for the hubbub to abate before continuing. "First of all, we're still in one piece. Frankly, I'm just as surprised as you are." After the cheers and good-natured ribbing subsided, I plunged straight into it. "Right, let's get down to business. *Borealis* will have to remain in close orbit for the next 72 hours, during which time we will prepare the ship for warp flight and conduct planetary scans of *Manannán* and its companion bodies. Once we've received flight-path safety clearance from *Carl Sagan*, *Borealis* will break orbit and proceed to rendezvous with the *Sagan*. Rather than us tearing out there at full speed and spending the next three weeks twiddling our thumbs, we'll take the scenic route. Our flight-path will involve making Hohmann transfer orbits around *Alpha Hydrae* Five and Seven to keep us out of the warp gate's firing line. Down the line, the gate at *Omicron Leonis* might have dispatched another drone ship at an earlier point in the calibration process, and it would be awfully embarrassing to have that slowcoach smacking into us at this stage of the game. Okay? Any questions?"

Unbelievable.

You'd think that 175 light years would put anyone well beyond the reach of Terran Confederation bureaucracy. Not so, as it turned out. Within a few hours of Terran authorities receiving Halvorsen's initial report, suffocating tendrils of red tape began creeping inexorably toward us. The abrupt arrival of 12.5 terabytes of official paperwork on my PDA came as no real surprise to anyone. As a matter of fact, I have been bracing myself to endure an inevitable flood of demands for information. For starters, they want to know every minute detail of what transpired after *Aurora* first entered the *Alpha Hydrae* system, presumably down to events that occurred entirely on the quantum level.

No problem. I knocked that job over in the time it took to finish two mugs of tea.

As the day wore on, it became clear that our faceless inquisitors were asking some questions that shouldn't be answered directly. I decided that the crew and Héloïse should sit in on this, mainly to provide their personal perspectives on answers to particularly awkward questions. Obviously, TC's pen-pushers are looking for a scapegoat, as they always do. I made it perfectly clear that Captain Hollister and his command crew were entirely blameless in all events leading to the loss of *Aurora*, and that nothing humanly possible could have been done to prevent it. As for the actual cause, I had no option but to cite the Precursor gun emplacement, describing it as 'an automated quarantine enforcement system of unknown alien origin'. That being said, I also had to describe the method which enabled us to *temporarily* deactivate the weapon and permit our safe passage through

Manannán's atmosphere. All done with an absolute economy of truth, of course. The real trick is in providing just enough detail to satisfy the investigating panel, but not quite enough to stir any significant official interest in Precursor technology. It took a fair bit of connivance on our part to talk down the weapon's capabilities, dismissing it as being comparable to an early *Achilles* cruiser-class gun mount. Just a clunky old terawatt-range phased plasma beam, powered by a planetary array of geothermal reactors. All things considered, a highly impractical and relatively primitive energy weapon. Apart from not knowing what specific circumstances will cause the weapon to reactivate, there's nothing particularly remarkable about it. Nothing more to see here. Move along.

Not too shabby an effort, even if I do say so myself. It should take TC's snouts at least a couple of weeks to trawl through this veritable ocean of data, even with a smart AI riding shotgun. We've managed to tick all of the requisite boxes, and then some. Most importantly, we've done it without revealing any of the more *interesting* aspects of our extended stay on *Manannán*. Naturally, there will be even more questions asked further down the track, but we already have our answers at hand, prepared well in advance. Not a word of lie to be found in our respective tales, either. We have cheerfully handed our diligent investigators a finely-crafted bouquet of truth... After thoughtfully removing any concealed thorns in the narrative, of course. Not a word has been said about *Father of Tides*, *Warpers*, Precursor nanites or pocket-size Doomsday weapons. Some things are best left unsaid. These trifling omissions should buy humanity a few more centuries, at least.

News travels fast. However, pure bullshit moves considerably faster. Now that the phase gate is operational, it's possible to access the InfoCortex once more. That's become something of a mixed blessing. As soon as my PDA detected the Confederation web's carrier wave, it reconnected and began downloading 102 years worth of system updates, news flashes, e-mail messages and a truly staggering amount of advertisements, effectively rendering it useless for the next week or so. Fortunately, my PDA is acting as the proverbial canary in the coal-mine. For now, it's the only one capable of accessing external data feeds. Purely as a precautionary measure at first, although it now seems like this was the only sensible thing to do.

We have been isolated from Confederation society for just over a century. Things will have changed.

Not just clothing styles, music or the latest cool-kid buzzwords in StreetSpik, either. Human attitudes change like the weather on *Belonna Prime*, only with far less predictability. What was permissible a century ago may no longer be considered acceptable behaviour, and our colonists might find themselves entering situations for which they are totally unprepared. To this end, *Borealis* has been tasked with curating that massive influx of raw data into something a mite more digestible. Don't get me wrong; this is not censorship. *Borealis* is entirely impartial in this matter.

Rather than have everyone drinking from a virtual firehose and attempting to make sense of the changed society they're about to enter, it would be much more productive to winnow out as much unnecessary guff as possible before giving the colonists unrestricted access to the InfoCortex.

Going by what I've seen trapped in my mail's junk filter today, Nigeria, Vietnam and Samoa are now mostly populated by devout widows of bankers, remorseful ex-Government ministers and deposed royalty. However, the spelling and grammar used in these dubious solicitations has vastly improved.

As a consequence of our imminent return to civilization, *Borealis* has become something of a Nine-Day Wonder. For all of the ships that have gone on Eternal Patrol, very few have ever been seen again. Occasionally, one might turn up as a cloud of debris or a crumpled mass on some half-forgotten Black Rock, and only very rarely as a lifeless hulk adrift in less-travelled spacelanes. After a number of particularly unpleasant experiences with wrecked starships, Frontiersmen developed a sure-fire method of dealing with drifters. If no lifesigns or energy signatures are detected within 24 hours of the first hailing call being transmitted, the derelict vessel is simply incinerated by the most effective method at hand. No boarding parties. No do-or-die rescue missions. No exceptions.

Borealis is a notable exception to that rule. Now that it's common knowledge that she's recycled from *Aurora's* remains, I've noticed a distinct 'return from the grave' vibe in many of the public and private postings on the InfoCortex. Most of the commentary seems reasonably positive so far, although I've also noticed that the ratbag element has begun creeping out of the woodwork. Mostly harmless Tinfoil Hat stuff so far, easily dismissed by anybody with one iota of common sense. However, there are other rumours that appear to be a mite too detailed to be entirely speculative. Rather than embark on a pointless hunt to discover the source of these leaks, I conjured it would be best to let the more outrageous claims to pass entirely unanswered. As for the reality of our situation, a brief yet candid video clip should dispel any persistent rumours that *Borealis* is: (a) Packed to the gunwales with murderous android duplicates of dead Torgaljinn colonists, or (b) A Kharaa-infested plague ship poised to destroy all Terran life in its path.

By the way, that 'Ascended Thetan' yarn is also 100 per cent blimp guano. *Sorry.*

Predictably, it didn't take Alterra long to smell blood in the water.

Borealis abruptly materialized in our quarters as Héloïse and I were about to turn in for the night.

"I sincerely regret this intrusion, Madame Maida." *Borealis* apologized, "Captain, priority encrypted F2F communication received on Alterra command channel. Code prefix: Savoy IV Delta Tau."

"Thank you, *Borealis*. I'll take the call in here. We might as well make ourselves comfortable."

"Very well, Captain." *Borealis* hesitated before activating the commlink, her expression quizzical.

"Sir, I seem to recall that it is customary to be appropriately dressed when communicating with one's employers. Shall I fabricate a fresh uniform for you, and perhaps a robe for Madame Maida?"

I grinned, shaking my head slowly and deliberately. Héloïse stifled a giggle. A golden opportunity.

"I appreciate the offer *Borealis*, but that won't be necessary. I'll adjust the camera's field of view."

After arranging my pillow at a comfortable angle, I settled back on the bed and activated the commlink. A flexible camera arm snaked out of the bed-side console, automatically positioning itself to provide the caller with a head and shoulders shot of me. Theoretically.

"Authenticate Savoy IV, Delta Tau. Selkirk, Alexander Fergus."

One glorious moment of stunned silence.

According to the caller's projected nametag, Milady Héloise and I have just had the pleasure of flashing Alterra's Senior Counsel (Corporate Asset Retention), one Milos Janáček.

"So, Mister Janáček... How may I be of service?"

Janáček's stone-cold expression flickered with undisguised distaste. *Bingo. Toaster-hater confirmed.*

"Am I addressing the synthetic entity calling itself 'Alexander Fergus Selkirk'? Please confirm."

"Yes, you are indeed. However, I prefer the term 'trans-human' rather than 'synthetic'. My consciousness may have been transferred to an android body, but I assure you... I still consider myself to be a human being, at least in terms of empathy, moral values and self-awareness. If you are not prepared to treat me accordingly, I strongly recommend that you terminate this link immediately. Find someone better equipped to conduct this matter impartially on Alterra's behalf."

"That won't be necessary, Engineer Selkirk. I am not here to make friends. Your current *unfortunate* condition is of no particular interest to either me or Alterra Corporation. Now that we are in full accord of our mutual dislike for each other, I shall proceed directly to address the matter at hand."

I smiled agreeably. "By all means do proceed, Mister Janáček. You have my utmost attention."

I abruptly shifted my position on the bed, as if trying to make myself more comfortable. Entirely unnecessary, of course. By deliberately disabling the camera's image stabilizer, even the slightest motion caused the view it transmitted to bounce around alarmingly. Current probability of Janáček coping another revealing eyeful: Eighty-seven point three per cent.

"When you're quite finished cavorting around with your... Companion, I'd like to begin." He sniffed.

Out of the camera's field of view, I wagged my finger warningly at Héloise. *Don't rise to the bait.*

"Mister Janáček, I am legally declaring my right to record these proceedings, as defined within ICC regulatory resolution fifteen, sub-section two, paragraph one. Do I have your informed consent?"

Janáček smirked nastily. "You may record the proceedings, Engineer Selkirk. After all, I am."

He continued, apparently savouring every word. "Alexander Fergus Selkirk, contingent upon your return to Earth, you and your ship's complement are hereby served with notice and bound by law to surrender all Alterra property currently held in your possession. For the record, this property includes one unregistered *Antares*-class starship designated *Borealis*, its entire cargo manifest, all exploratory, maintenance and defence vehicles, any unconsumed victuals, tools, equipment, ancillary machinery and general stores recovered from the destroyed Alterra vessel, TCS *Aurora*. All personnel currently aboard *Borealis* are legally obliged to remove themselves and all of their

personal effects from the vessel within twenty-four hours of docking. Be advised that non-compliance with this directive shall be prosecuted to the full extent of the law."

I stared at Janáček in frank disbelief.

"You've left us with nothing but the clothes on our backs, man. What about the colonists?"

Janáček shrugged. "Not my concern or Alterra's. Once you've docked, you're all on your own."

"What about my wages and employee entitlements, then? I must have something coming to me!"

Janáček shook his head slowly. "Rather unlikely, I'm afraid. Your contract with Alterra was automatically terminated when *Aurora* crashed on *Alpha Hydrae IV*. Even though you survived, your eligibility to receive monthly salary payments and sundry entitlements such as Deep Range Allowance, Officer-grade victualling subsidies and hazardous environment allowance expired precisely ninety days thereafter, as specifically stated in the terms of your employment contract. Presumably, most of your uncollected earnings may have been absorbed by administration fees by now. I suppose I can check with HR, if you like."

"This isn't what I wanted to hear. I-I just can't deal with this right now." I said, struggling to keep myself from shouting obscenities at the smug face on the other end of the link. "We're going back to Terra to live out the rest of our spans as beggars, thanks to you and that damned Corp. We can't even fight this in court because you've taken everything we have. You... You've killed us."

"I'm sorry, Selkirk. There's nothing more I can do for you. It's nothing personal, you understand."

"Aye, nothing personal. Just doing yer job, Laddie." I muttered bitterly.

Janáček smiled and nodded. It was a smile you'd cheerfully rearrange with something heavy.

"Personally, I'm glad that we can finally close the books on the whole *Aurora* fiasco. You've been extremely helpful in resolving this matter for us, Engineer Selkirk. Thank you for your cooperation."

"I understand your position, Mister Janáček." I replied icily. "One question, though... Did Alterra eventually mount a search and rescue mission after failing to regain contact with *Aurora*?"

Janáček consulted his desk terminal. "Not immediately, Engineer Selkirk. There were no Alterra vessels operating in that sector at the time. However, a Torgaljin Corp ship en route to *Imladris* in the *Epsilon Hydrae* system generously offered to investigate *Aurora*'s presumed disappearance."

"And what was the name of that vessel, Mister Janáček?" I inquired innocently.

"The commercial frigate *De Ruyter*."

I smiled grimly. "Ah yes, I remember now. Charming folk, those Torgaljin chaps."

"What do you mean? Did their rescue team manage to make contact with you?"

"Aye, they did. In fact, I have a recording of the rescue mission. Transmitting now."

Janáček watched the video feed, his cocky smirk disappearing with gratifying speed.

"They killed me, Mister Janáček. Why would they do that?"

"You must have threatened them somehow. Surely they wouldn't..."

"I was completely unarmed, Mister Janáček. Invigilator Galen Tomar fired at point-blank range. Fortunately, my base had an operational Valkyrie Field. After I had recovered, I was able to subdue the Torgaljín boarding party. I freely admit that they were briefly detained in somewhat *uncomfortable* conditions, although they were released without having sustained any significant injuries. However, their second attempt on my life had a far less positive outcome."

I gave Janáček a little while to digest the full import of what he had seen. "From my perspective, that does look like deliberate murder, Mister Janáček. I would like to know who ordered it. My base sensors detected a pair of *Cyclops*-class submarines prowling around the wreck of the *Aurora* for quite some time before the boarding party found my base. They were clearly searching for something else, and my presence may have been considered an inconvenience. Now, by a strange coincidence, I knew precisely what they were looking for, because I had already found it. Kindly consult Alterra's archive files, key-word STARFISH. You may have to dig around a little. I'll wait."

Janáček's brow furrowed. Obviously, he's having a rough time accessing the relevant files, as they were probably encrypted by someone well above his pay grade. One thing's for sure, he won't find this information laying around in a folder labelled 'Shady Deals' or 'Puppies For Orphans Initiative'.

"With your permission, I can access Alterra's files remotely. To preserve data integrity for evidentiary purposes, all executed commands and processes will be logged, and a full transcript attached to my preliminary case briefing. Do I have your permission to proceed, Mister Janáček?"

"Absolutely not!" Janáček thundered, slamming his fist on the console. "Are you mad, Selkirk?"

"Thank you. That is precisely the answer I was hoping for. Never betray the sacred trust that Alterra has placed in you. Unfortunately, Confederation Judicial will be rather more interested in the contents of Alterra's corporate archives than they may have been before. In the spirit of professional courtesy, I'll tell you all about STARFISH, and we'll let the dice fall where they may."

Janáček's face turned an ashen grey upon hearing this news. If he has more than two neurons to rub together, I conjure he's taking a quick trip into the immediate future to see how this pans out for him. Still, it can't hurt to throw him a wee bone or two. He's only the errand boy.

"*Aurora* was carrying a STARFISH autonomous mining rig in her cargo bays. Proscribed Torgaljín technology. Its use is illegal on all K to M-Class worlds, or indeed any other planet capable of sustaining multi-cellular life. Let this sink in, Mister Janáček... An Alterra vessel was chartered to deliver a prohibited Torgaljín Corp resource extraction system to an M1-Class planet. A designated Paradise world that neither corporation has any legal claim to commercially exploit, I might add."

"Don't be ridiculous, Selkirk. At the time in question, Planet 4546B had no such designation. It was logged as an uninhabited M4 water-world. Even if this STARFISH device was onboard *Aurora* as you say, you have no concrete proof that it was ever intended to be deployed on that particular world."

"Yes, you're absolutely right. That statement may have been pure speculation on my part. A perfectly reasonable objection, Sir." I scratched my beard absently, "Still, I can't quite fathom why Torgaljin Corp would construct a hidden research and production facility, particularly if it didn't have access to mineral and organic resources necessary for its continued operation. Obviously, the STARFISH rig was intended for delivery elsewhere. My apologies. I stand corrected."

I sent another video packet back down the line. With a barely concealed mutter of annoyance, Janáček opened the file and began watching. His sour expression ratcheted down another notch.

"So, what exactly am I supposed to be looking at? You're the engineer. Talk me through this."

"This is drone footage taken in *Aurora's* main hangar bay. As you can see, much of what was in there was either torn loose on impact, or destroyed by secondary explosions sometime thereafter. Some of the expedition's vehicles and power loaders survived, but only because they were stowed in secured docking bays. The tie-downs on all of those shipping containers are rated to withstand a 125-g deceleration, but that wasn't enough to prevent them from being thrown about like toys. Take particular notice of those shipping containers, Mister Janáček. Over two hundred of them, unmarked, except for a tag on each container bearing an alphanumeric manifest ID code. No HAZMAT labels, no clear indication of their contents... Doesn't that strike you as slightly irregular?"

Janáček snorted irritably. "Standard Alterra shipping containers, presumably intended for in-house use only. If they were being transhipped to another Corp, they'd all be marked accordingly. ICC interstellar transport regulations. Even I know that, Selkirk. If you have a point to make, make it."

"Here we are. Container Bravo-Fifteen. Support systems, components and commissioning equipment for an AI memory core. Admittedly, there's not much left of it, but that's what usually happens when a nearby container loaded with energetic compounds lights up. In this case, our presumed culprit was Container Charlie-Two. The drone detected heavy traces of Molanex seismic survey charge residue, along with a veritable cocktail of other substances of dubious legality."

Janáček scowled. "So what? Whatever proof you thought you had has been completely destroyed. Most of those ruptured containers held nothing more than construction materials; titanium ingots, Plasteel, polymers and such. The AI core was obviously a JUNO backup unit. Stop wasting my time!"

I smiled grimly. "Ah. That's where you're wrong. There's a Torgaljin Corp logo on the core housing. If you look closely, you can just make out the word STARFISH on one of the smaller transit cases."

"That means absolutely nothing. Legally, you haven't got a leg to stand on, and you know it."

"If you say so. However, we could forget that this conversation ever happened. You report to your superiors that *Aurora* and her cargo were completely written off in the crash, and that it's not economically viable to reclaim her materials as salvage. I'm prepared to offer Alterra significant material compensation drawn from the cargo we have onboard. All I'm asking in return is to retain free and clear ownership of *Borealis*, without let or hindrance. We need this ship."

"Impossible." Janáček replied coldly. "You're in unlawful possession of Alterra property. You used material stolen from *Aurora* to construct *Borealis*. Incidentally, that's known as theft by conversion, Engineer Selkirk. You will hand over the ship precisely as instructed. End of discussion."

I shook my head sadly. *Well, I did make him a genuine offer, and he's refused it. Too bad.*

"One final point, Mister Janáček... Earlier this week, I made contact with Confederation authorities. Apart from receiving a sizeable request for information on the *Aurora* disaster and various other official documents, I was able to lodge a retrospective salvage claim on the vessel, supported by archival footage recorded during the recovery operation. Given my circumstances at the time and a total absence of competing claims, my bid was upheld without question. Now hear this: Alterra has no valid claim to *Aurora*, as it was officially listed as missing, presumed lost with all hands. Alterra had precisely two years after the crash in which to mount a salvage expedition, but failed to do so for reasons best known to its Board of Directors. Subsequently, the vessel was struck from Lloyd's Register more than 85 years ago. I am now the sole owner of *Aurora*, its cargo, stores, equipment and all of its associated chattels. Be advised that I am willing to offer fair compensation to Alterra Corporation, of an amount stipulated by a Confederation arbitrator upon our return to Terra."

"You do realise that Alterra will fight you every step of the way, Selkirk." Janáček growled. "You can't possibly compete against the combined resources of an entire corporation. We will bury you."

I shrugged. "It seems to me that you don't fully understand the finer points of maritime law, Mister Janáček. Are you familiar with the concept of Real Peril, in relation to marine salvage operations?"

Janáček smiled mirthlessly. "I suppose you're going to lecture me at length on the subject, regardless of whether I am or not. Very well then, enlighten me."

"Here's the mission footage. The presence of Real Peril during salvage operations significantly modifies the outcome of any decision to award additional payments to the Salvor. As a private individual voluntarily salvaging an unclaimed vessel, I already have assured possession of a major portion of the ship and its cargo, legally free and clear. The automatic termination of my contract with Alterra saw to that. However, the impact and following explosion ruptured all four neutron accelerator silos in the ship's drive room. Radioactive contamination began to threaten all life in an ever-expanding radius. Naturally, it fell to me alone to seal the breaches, but to do that, I had to cross an expanse of ocean heavily populated with hostile marine life forms, with only a Seamoth and rad-suit as protection. Next, I had to gain entry to a wreck burning so fiercely that molten metal posed a constant hazard. After fighting my way past a swarm of aggressive alien carrion feeders, I eventually managed to reach the drive room. Do you see the blue glow in the water, Mister Janáček? That's the signature of Cherenkov radiation. I had to swim around in that. Luckily, the rad-suit offered just enough protection for me to get the job done. However, it wasn't much protection against the parasitic life forms also swimming in the flooded silo chamber. As you can see, this was a particularly hazardous operation."

Janáček sat speechless, overwhelmed by the intensity of the images he had just witnessed.

So, does this support my assertion of Real Peril, or are you willing to pursue a course of action that Alterra cannot possibly win? Walk away, Janáček. It's your only choice."

The following morning, I awoke to find Héloise had risen quite some time before me. Her PDA lay on the bedside table; her customary shorthand for leaving me a 'Do Not Disturb' note. To be fair, her third trimester has had some particularly rough days, but she is determined to press on regardless. That's her default Guardian mindset at work, and there's not much I can do to change it.

Her first three months of pregnancy were largely uneventful, although I had to put my foot down when it came to playing tag with Stalkers. Up to a point, I agree that it's quite sensible to preserve one's core strength, stamina and reflexes during pregnancy, although there are far less risky exercise partners available. Fortunately, Héloïse is equally happy swimming with her pet 'Cuddlefish' *Minou* in the Shallows containment pool, and that's probably where she is right now.

After a mug of tea and a leisurely shower, I headed down to the Marine Sciences deck. IANTO has been collating a massive amount of data obtained from our final planetary survey, and he's pretty hyped up about something. Precisely what it is, he wouldn't say. Nothing requiring my immediate presence apparently, although he did casually hint that I might be interested in some of these discoveries. According to the latest update from Gate Control, we still have around 18 hours before our departure, so it wouldn't hurt to swing by IANTO's lab to see what he's found. Hopefully, it will be something a wee bit more awe-inspiring than another *slightly* different Peeper variant.

The first creature that IANTO showed me bears a superficial resemblance to a four-eyed Terran penguin, with seal's fur instead of feathers. Same colouration and general basic body shape as a penguin, although its over-sized, puffin-like beak is oriented vertically in relation to the rest of its body. I conjured this variation in form would confer significant advantages in terms of streamlining and hunting efficiency underwater, yet they essentially look like normal penguins.

Well, at least until one opens its beak. Pure, unadulterated nightmare fuel.

Body by Darwinian selection, mouth parts by H.P Lovecraft.

"As you can clearly see Sir, most of the fauna in the polar regions of *Manannán* have diverged considerably from evolutionary paths established in the planet's temperate zones. Familiar forms such as Peepers, Hoopfish and Bladderfish are still present in this environment as prey species, although there are many remarkable life forms that we have not previously encountered."

"Aye. It's a bit of a shame we've never managed to explore the planet's polar zones." I said wistfully. "Mind you, we've had more than enough to deal with in own back yard. Still, I conjure it might have been well worth mounting an expedition or two."

IANTO seemed a mite uncomfortable at this point. "I suspect that an expedition may not have ended well for us, Sir. I launched forty environmental survey probes as we passed over the poles. Only three of them are still operational. All things considered, that is an alarming rate of attrition."

I gaped in disbelief. "Only three out of forty? Do you know what happened to the lost probes?"

"Yes, Sir... In most cases." IANTO replied. "I even have imagery of the organisms responsible."

Some encounters were brutally short, while others actually showed the probes being stalked for several minutes before transmission abruptly ceased. Invariably, our intrepid probes ended their brief spans in a savage maelstrom of teeth, tentacles and claws. However, one probe appears to have been incinerated by a patch of flowers. Giant heat-emitting daisies with translucent petals.

If this isn't an obvious hint that a planet doesn't want you around anymore, I don't know what is.

Of the three surviving probes, one revealed a truly terrifying discovery. A Leviathan-class creature called an 'Iceworm'. Over 90 metres in length, capable of melting a path through compacted ice for itself as easily as an earthworm travels through loose soil. I watched this behemoth ambush and devour a pack of Snow Stalkers (a furred, quadruped variant of the marine Stalker) within seconds. A supreme ambush predator in every respect. These creatures would forever deny us the frozen surface of *Manannán*, while lesser Titans jealously protect its depths. Mankind will never hold dominion there. We have been merely tolerated thus far, and our welcome has plainly worn out.

"IANTO, you mentioned that there are three probes left. What happened to the other two?"

IANTO tapped the terminal keypad. The holographic image shifted, revealing the drone's slow passage down what appears to be an undulating silvery tunnel. I have a fair idea of what this strange and obviously organic structure resembles, although given the remarkable diversity of life on *Manannán*, I'm reluctant to volunteer any insights on what it might be. In this case, I gracefully defer to IANTO's broader knowledge of the planet's marine life. For all I know, it could be a colony creature of some kind, or something vaguely like a Terran salp. It could well be *Manannán's* version of a giant sea-squirt. Even so, I just *had* to ask. Call it morbid curiosity.

"Is that probe where I think it is?"

"I'm afraid so, Sir." IANTO replied morosely. "Probe *Sigma* has been ingested, and it's currently travelling along the digestive tract of a highly aggressive Leviathan-class organism. Unfortunately, the probe was ambushed almost immediately upon entering the water. Proximity sensors triggered the cameras, although its threat avoidance system was unable to respond in time. At least the probe was able to capture a few clear images of the creature before it was consumed."

A pitch-black shape rocketed out of the Stygian darkness below, too fast for human eyes to follow. Only a ghostly green haze of phosphorescence around the creature betrayed its rapid ascent, a pale glow of luminescent plankton churned violently about in its wake. As it closed in on the probe, I could barely make out its angular, arrow-shaped head and elongated body. Its mouth parts are formed into a broad vertical slit located on the underside of its head; a chasm of nightmares, wreathed with cruel, needle-sharp teeth. Seven pairs of mandibles surrounding the creature's mouth suddenly unfurled, spreading wide to capture and engulf the probe. It never stood a chance. Total event duration: Three seconds. The Shadow Leviathan is an extremely efficient hunter.

"Surprisingly, the probe's external casing is still intact." IANTO remarked. "According to the onboard chemical analyser, the creature's digestive mechanism is enzymatic rather than acidic, meaning that there is a strong probability that Probe *Sigma* might survive this encounter. Conversely, it may not."

I laid a reassuring hand on IANTO's shoulder. "Fear not for *Sigma*, my friend. It too shall pass."

My HUD's time display flashed 07:30. Daylight's burning. Time to coax Héloïse out of the pool.

"I'll catch up with you at breakfast, mate. Jens Halvorsen and his bridge crew will be docking in 25 minutes. If you could round up our pack of jokers, we'll meet you in the *Zeppelin Lounge*. Thanks."

After collecting a hot drink from the autogalley for Héloïse, I entered the airlock leading to the Shallow Reef habitat. I'm rather proud of this side-project of mine. A self-contained oceanic

microcosm, specifically designed to support a full range of creatures normally found in this biome. This structure contains five megalitres of *Manannán's* seawater; roughly twice the volume of an Olympic swimming pool. The 'seafloor' has been sculpted from nanocrete to simulate the natural contours of a notional section of the reef, and covered with an overlay of the planet's mineral sands. So far, the results are highly encouraging. Various sessile organisms such as corals, shrooms and seaweeds have already established a solid foothold in there, and most of the higher life forms are acclimating nicely to their new environment. There's still a wee bit of tweaking required to achieve a perfectly balanced and self-sustaining ecology, although it's early days for this experiment.

The Shallow Reef habitat has been built for a far grander purpose, other than an exotic hydrotherapy pool for Héloïse... Not that I begrudge her a single second spent in here, of course. At this advanced stage of pregnancy, any relief from constant back pain is most welcome. IANTO initially suggested using one of the ship's microgravity chambers to relieve the worst of her symptoms, although it only took one zero-g therapy session to convince IANTO that his idea was a complete non-starter.

Pre-natal nausea.

It's not just a queasy sensation in a mummy's tummy. Trust me.

Hydrotherapy is the way to go. I have designed a lightweight diving kit specifically for Héloïse to use, and she has taken to this notion like a... Well, like a pregnant Guardian to water. One session every morning, and one just before retiring. This regimen works like a charm on her physical discomfort, and it goes a long way to smoothing out any ups and downs that she might be experiencing. Left to her own devices, she would simply close up and tough it out. I'd rather see Héloïse continue to deal with this experience on her own terms, without wrapping her in cotton wool. She *needs* this level of challenge and excitement as an emotional outlet. It's as vital to her as oxygen.

There are subtle signs that Héloïse is making some concessions to impending motherhood, such as allowing her own hair to grow back. When I asked why, she explained that any child in the company of a Guardian often becomes the focus of unwelcome attention. Since only the wealthy can afford the services of a Guardian, anyone seen in their care might be worth snatching. If someone is desperate enough, they will probably give it a go. However, most of those encounters end badly for any would-be abductors. Occasionally, some do get lucky. Héloïse's caution is entirely justified, particularly in light of recent developments involving Alterra. It's still the same old 'Verse.

After climbing a companionway, I reached the hab's perimeter catwalks. Rather than walk around the entire circumference at ground level searching for Héloïse, I conjured it would be far quicker to locate her from above. First off, I filtered out reflection patterns distorting the water's surface. This also cancelled out the glare from overhead floodlights. I cycled my visual input through various wavelengths of light until I found one that gave the best clarity, then commenced a full sweep of the tank. This wavelength displays virtual 'vapour trails', residual turbulence left behind by the tank's occupants as they move through the water, a mass of data represented by tangled lines criss-crossing my field of vision. More aggressive filtering is required. Adjust for time-scaled density, reject any track below a mass-based threshold, and then selectively remove all previously recorded patterns. *Voilà!* Only one track remains, spiralling and looping in a distinctively purposeful fashion.

Héloïse emerged from a thicket of Creepvine at speed, thankfully without a Stalker in hot pursuit.

I took a moment to admire Héloïse as she sped through the water, her jade-green Skinsuit rendered opalescent by the false colours of turbulent flow. Shoulder-length hair flowed behind her as liquid fire, creating its own distinct aura. She reduced speed, angling the suit's wrist-mounted thrusters to induce a slow, spiralling roll. I stood entranced, as if seeing my beloved manifest in her true form. A Polynesian sea-goddess, her hair and its pearly aura spreading like the wings of a stingray, an unconscious image reinforced by the deadly length of her *musubime* trailing behind.

Behold this miraculous woman. With her at my side, mighty deeds shall be done.

By the time I reached the deck level of the habitat pool, Héloïse had exited the water and was already halfway through stripping off her Skinsuit. I passed her a towelling robe left draped over the pool's railing. After donning the robe, she hungrily eyed the bowl of Creepvine *miso* soup I carried.

"Is that for me? *Merci, Chérie.*" She said, gratefully cupping her hands around the bowl for its warmth. "I'm sorry, Alexander. I lost track of how long I've been in here. Are we going to be late?"

"Not by much, but you'll have to put your skates on once you've finished your soup and showered. Halvorsen's shuttle docks in fifteen, and I need to have a quick word with him in private."

"No problem, my dear Captain. I'll be ready in five." Héloïse replied breezily.

We made it to the hangar deck with a few minutes to spare. *Borealis* announced a general alert over the local PA, simultaneously activating the hangar's warning strobes to signal that the outer doors are about to open. As *Borealis* is equipped with our version of Precursor fluidic shields, there is no need to depressurize the compartment beforehand, although all personnel working in the hangar bay are still required to evacuate into air-locked safety bunkers during flight deck operations.

Out of curiosity, I tuned into the comms chatter between the inbound shuttle and our traffic control.

"*Borealis* ATC, this is shuttle *Ogun Onire* aligned on final approach. Awaiting terminal guidance."

"Roger that, *Ogun*. Capture successful, link is secure. We have your conn. Reeling you in now."

Under remote control, the shuttle approached the fluidic shield's boundary almost cautiously, its mass now moving slowly enough to slide smoothly through the energy barrier unimpeded. In case you're wondering, I've ran a few simulations of what happens when an object suddenly increases its velocity halfway through the shield, and the results aren't pretty. Even less so, when that molecular shear effect intersects with a living organism.

"Attention on deck!"

As Captain Halvorsen reached the foot of the shuttle's ramp, DIGBY placed a boatswain's call whistle to his lips and smartly piped him aboard. Caught entirely off-guard by this archaic mark of respect, Halvorsen abruptly broke his stride, snapped to attention and saluted.

I stepped forward and returned his salute. "Welcome aboard, Sir. I sincerely apologise for the last-minute invitation. *Borealis* is entirely at your disposal."

Halvorsen smiled warmly. "Thank you, Captain Selkirk. I hoped we might catch up again before your departure. Word of warning, though... I have a small but extremely awkward favour to ask of you."

"Whatever it is, consider it done. Anything for an old mate, Jens." I grinned.

"Hold on, man! I haven't told you what the favour is yet." Halvorsen lowered his voice conspiratorially, "I've got a couple of NPAs onboard, and I want them off my ship. Bad for morale."

"I can see how that might be a problem on a long haul. Nothing worse than a non-positive attitude in a Spacer." I agreed. "How about arranging a tragic airlock malfunction once we're underway?"

"I wish." Halvorsen muttered. "To be honest, they're a pair of oxygen thieves. The fire's gone out of their bellies, and they just want to go home. One of them is a regular sick bay fixture, and the other is an industrial-strength pain in the arse. No-one wants to work with them as offsidiers."

"Done deal. I'll take them off your hands." I replied amiably. "They'll be working off their passage too. I'll make gorram certain of that. There's precious little sympathy for slackers and malingerers here."

"Good man. I knew I could count on you. I'll transfer their articles to your PDA, officially seconding them to *Borealis* for the voyage. At least they'll still be on the payroll until their boots hit dirt."

I shifted my feet awkwardly. "Um... I wouldn't be too sure of that, Jens. I believe that I may have *slightly* blotted my copy-book with Alterra when I told them to take a running jump. That shyster Janáček wanted me to hand over *Borealis* and her entire cargo, but the Corp has no legally enforceable claim to her. Salvage Law 101."

"Rightly so," Halvorsen agreed. "You *are* planning to compensate Alterra, aren't you?"

"Absolutely. One-tenth of Aurora's original raw material value, or a suitable sum determined by arbitration. I'm playing this strictly by the book, making it nigh impossible for Alterra to contest the legitimacy of my claim in a court of law. However, that's not what has me concerned. There's a very strong possibility that Alterra might pull a dirty one on us before we reach Terra."

Halvorsen nodded grimly. "Not directly, although it's likely they'll do it through a quiet back-channel. Alterra does have its squeaky-clean public image to uphold. My best guess is that Torgaljin Corp might act as a discreet intermediary for hiring one of the off-world merc outfits. Plausible deniability. Any... adverse outcome would be perfectly untraceable to either party, of course."

I reached out to shake Jens' hand, deftly palming off the storage chip I had held concealed.

"Precisely. That's why I've prepared this Mempak. If we don't make it back to Terra, hand this over to Confederation Judicial. There's more than enough dirt in there to bury both Corps. Murder, piracy, collusion with a declared competitor, conspiracy to exploit the resources of an unclaimed M-class planet, unlawful detention and presumed torture of sentient alien life forms, illegal research and manufacture of alien pathogens. That's a fair catalogue of sins. Let's hope they won't add to it."

Given the transit times involved, I conjure that we could be jumped anywhere between *Procyon* and the *Kuiper Belt*. That's a fair span of unfriendly space to traverse. If we can make it to *Tannhäuser Gate* in one piece, Confederation patrols might provide a measure of deterrence and hopefully, some active protection. To be honest, I'm not counting on anyone springing to our defence if things do turn ugly. No skipper worth their salt would charge blindly into a firefight without knowing

precisely who the villains are, although the line of distinction can be a wee bit vague in some sectors. That seemingly defenceless long-hauler being mobbed by a swarm of Colonial fighters might be infested with Kharaa or the fighters could be stolen, piloted by a local Jacker clan. Either way, if you make a bad judgement call on a snap decision, you lose. You never really know until the dust has settled. Even though it sounds utterly callous, the most sensible thing to do is hang back at a safe distance and wait for a reasonably convincing distress call.

If push does come to shove, there's little doubt *Borealis* would tear any would-be aggressor a new one, and then fly clean through the hole. In addition to ten mass-driver turrets and enhanced shielding based on Precursor technology, she also carries six phased-plasma cannons and a radial array of hypervelocity sand-casters to confound any inbound missiles. That's roughly equivalent to a Confederation heavy cruiser's armament. Naturally, we're legally obliged to disarm most of these weapons before we enter the Terran Core sector. Asteroid deflection systems only. Civilian vessels armed with military-grade ship killers are generally frowned upon in civilised space.

Our standard operating procedure is to treat all unknown ships in visual range as potentially hostile. If our hailing calls go unanswered, the alert level in *Borealis* will jump up a notch. If a vessel maintains an approach vector without clearly stating its intentions, it will be automatically targeted. Our red-zone perimeter is set at 50 kilometres. Once a ship crosses that boundary without making any attempt to establish communications with *Borealis*, its crew may even have the momentary satisfaction of firing the first shot. If I'm feeling particularly charitable at the time, I might advise them to evacuate their vessel before we return the compliment.

As we walked back to our table, Héloïse cast a critical eye over my breakfast selection.

"Isn't that a bit over the top? I can live with the orange juice, but steak and eggs for breakfast?"

"Not at all, Dear Heart. In fact, it's a traditional astronaut's breakfast. Pure protein, low residue."

"Hmm... Far too heavy for my liking. Still, I wouldn't mind some of those mushrooms on toast."

"Nae problem, Lass. Consider it done." I set my tray down on the nearest table, then headed back to the autogalley. After a couple of steps, I turned around suddenly. As expected, I caught Héloïse with a stolen slice of mushroom raised halfway to her lips. Our eyes locked. She smirked triumphantly, popping the morsel into her mouth without the slightest flicker of remorse.

There's an electric feel to the atmosphere in *The Zeppelin Lounge* this morning. Conversations are loud, lively and for the most part, good-natured. A rough headcount reveals that almost 80 per cent of the ship's company are dining here today, rather than the customary anarchic scattering of folks throughout the ship at this time of day. I conjure many of them are here to witness a parting of the ways between Halvorsen and me, indisputable proof that the voyage home is about to begin.

Halfway through a second mug of tea, I activated my PDA. "Right Jens, let's take a gander at those poor wee bairns you've dumped on my doorstep." Our first contestant is Mohan Chandra, a first-year engineering cadet. Fresh out of Alterra's sausage machine... Sorry, '*Mercantile Fleet Academy*', he signed on with the *Carl Sagan*, presumably aiming to fast-track his career.

With a solid academic record behind him, Mohan stood a reasonable chance of making his way up the totem pole. Unfortunately, he wasn't entirely prepared for the harsh realities that beset a lowly Gremlin on a daily basis. When you're the new face in ship's company, all past achievements are automatically reset to zero. You may have been a stellar performer on the ship systems simulators dirt-side, but that doesn't count for a Gasopod's fart out here in The Black. The very least that is expected of a Gremlin is to do what you're told, and do it to the best of your ability. Sure, it's often menial work of the worst kind at first, but a willingness to get your hands dirty occasionally will significantly improve your lot in life. A simple truth that Mohan has apparently failed to grasp.

My best guess is that the allure of turd-herding was entirely lost on Mohan. Every Gremlin gets lumbered with waste-processing systems maintenance at the start of their first tour. Let's get something straight here; if you suspect this is a simple case of senior techs hazing the new kids, think again. There is no actual malice in assigning WP jobs to the newest hands on deck. 'Dirty Duty' is indeed a rite of passage, but not for the reasons you'd expect. This is how canny supervisors test the true mettle of junior crew members. If youngsters complete all of their assigned tasks promptly, diligently and without undue complaint, that is generally enough to satisfy most department heads. After a few months of Black Hand routine, most Gremlins catch on to what's actually happening and carry their share accordingly. Once a Gremlin has a proven reputation for reliability, their daily tasks become more intellectually satisfying and generally take place in far more salubrious surroundings.

As an aside, all Alterra employees are contractually entitled to take fifteen 'mental health days' off per Solar year. It's standard practice for most folks to take at least one or two days off per month; an extremely valuable fringe benefit for anyone working in a high-stress environment. To be perfectly candid, Engineering isn't a particularly stressful occupation. It either works, or it doesn't. Occasionally, there might be an odd flurry of frantic activity around Hull, Reactor and Life Support systems, but for the most part, it's a fairly cushy job. However, when an individual manages to burn through all fifteen days in four months and he/she works in Engineering, eyebrows will be raised. After running out of MHDs, Mohan started dreaming up an increasingly outlandish catalogue of sick bay calls, including such perennial favourites as: Allergic reactions to a staggering variety of chemically inert materials, peripheral nerve damage caused by manual data entry during stock-takes and crippling migraines, supposedly triggered by working two decks above heavily shielded field coils. Personally, I wouldn't have cited a slightly dusty ventilation duct as the source of an alleged *Salmonella* infection, but Mohan went for it anyway. If nothing else, I'd say he's successfully managed to elevate pure and applied slacking to a fine art form. Secretly, I'm rather impressed.

Not entirely sure how he slipped through the V-K test during his Deep Range suitability assessment, but what the hell... I'll give that wee roaster one last chance to reshape himself on the way home.

Without even opening the second passenger's dossier, I know precisely who it refers to. There's only one person who qualifies as an 'industrial-strength pain in the arse' aboard the *Carl Sagan*, and I've already met her... *Doktor Radka Zelenka. So here we are, left saddled with a unmotivated Gremlin hypochondriac and a confirmed misanthrope with an uncanny talent for constructing nuclear munitions. Could be worse, I suppose.*

"Aye, they'll do." I muttered, now completely resigned to an 'interesting' voyage home. "*Borealis*?"

"Your orders, Captain?" The ship replied briskly.

"We have two late arrivals waiting aboard the *Sagan*. Please send a shuttle to collect them."

"Acknowledged, Sir. Shuttle systems have been reconfigured for telepresence piloting. Pre-flight test sequence successfully completed. All systems are nominal. ETA *Carl Sagan*, fifteen minutes."

"Thank you, *Borealis*." I turned to Jens. "You might want to give your runaways a wee nudge. I fancy they'll be needing to pack and say farewell to their shipmates, so they'd better get a move on."

"That won't take too long. It's not as if either of them has a fan club." Halvorsen observed drily.

Halvorsen glanced at his PDA. "Zero nine-fifteen. Well, my friend... We'd better be shoving off. If you're still planning to make that launch window at twenty-three hundred, I reckon you might want to flash up your boilers sometime soon. Only an old hand's suggestion, of course." He grinned.

I shrugged. "Plenty of time. No need to rush off just yet, Jens. *Borealis* stands ready in all respects, and she's straining like a greyhound in the slips. After a month and a half twiddling our collective thumbs up here, we're down to running damage control drills purely for shits and giggles."

Halvorsen roared with laughter. "Half your luck, Selkirk! We're stuck out here for another six months until construction of the outbound Gate is complete. Fair credit though, your assistance with resources shaved at least three months off the project... And for that, I am extremely grateful."

"That reminds me; if you ever need to top up your deuterium reserves, the refinery on *Skull Island* is still in operational order. There's even a dormant JUNO node in residence, ready to take care of the donkey work. Now, a word of caution. Tread softly while you're down there. Wherever possible, restrict all surface and underwater activity to a one kilometre radius around the island. Beyond that boundary, I can't vouch for the safety of your crew."

"Fair enough." Halvorsen replied. "But what happens if we have to evacuate the *Sagan*? Highly unlikely, but anything could happen out here. I can't see us lasting too long when we're effectively trapped on your island, penned in by bloody Xeno-krakens. As soon as our rations run out... Pffft."

"Great minds think alike, Jens. I've considered that possibility. Stand by to receive a data burst."

Halvorsen's PDA screen glowed. "*Incoming message. Sender: Alexander Selkirk.*"

"There you go, Laddie. Full command activation authority for *The Broch*. Just transmit that data packet to reactivate the JUNO node on *Skull Island*, and you're halfway home to surviving in style. Your authentication phrase is '*Climb Mount Seleya*'. JUNO will dispatch a *Cyclops* to collect your crew, although you might want to fabricate a few more subs to speed up the transfer. All I ask is that your gang o' hoolies wipe their boots afore stepping inside, and switch off the lights when you leave... Oh, and absolutely no loud parties after 21:00. It sets off the neighbours something fierce."

Halvorsen chuckled. "Now I *know* you're pulling my leg. There isn't a creature on that planet capable of breaching your defence system down there. We'll be as safe as houses in that fortress of yours."

I shook my head. "I wouldn't be too sure of that, Jens. As far as I can tell, the planet's polar regions are definite no-go zones. There's beasties down there that would make me think twice about taking them on. In fact, I seriously doubt that we've seen the very worst that *Manannán* could throw at us,

and we're in no hurry to find out otherwise. We dropped 40 recon probes as *Borealis* passed over the ice caps, and only three survived. Hostile wildlife accounted for most of those losses. I'd say that's a pretty emphatic warning in anyone's language."

Halvorsen eyed me shrewdly. "Coming from anyone else, I'd say they were trying to hide something down there. Whatever your secret is, there's probably a reason to keep it out of Alterra's hands."

I grinned. "No secrets here, mate. IANTO, please show Captain Halvorsen exactly what happened to our recon probes. Replay at 25 per cent of normal speed, five second intervals between each clip."

Halvorsen shook his head in disbelief. "A *flower* destroyed your probe? You're certain about that?"

"Absolutely, Sir." IANTO replied. "Warmth is a scarce commodity in the planet's polar regions. As far as I am able to determine, this particular species uses heat to attract warm-blooded life forms to the ice caverns where it grows. It extracts nutrients from animal waste products, conveyed to an extensive root system by the melt-water that collects around its base. I suspect that the plant reacted to the probe's proximity in its usual manner, and when the probe refused to move closer or excrete anything useful, the plant dramatically increased its thermal output in an attempt to carbonise the probe." IANTO paused, smiling faintly, "Any nutrient is acceptable nutrient... All donations gratefully received. Although this may seem like an inefficient feeding mechanism viewed strictly in terms of stored energy expenditure, the plant can also sustain itself by photosynthesis if necessary. Remarkably sophisticated behaviour for a presumably non-sentient life form."

I noticed that a sizeable crowd had began gathering around our dining booth. "IANTO, please recast the playback to all display terminals in here. Seems like there's a fair bit of interest in the beasties we're leaving behind. No great loss, though. Confederation EPA wouldn't be too pleased if anything from this rogue's gallery broke loose on Terra. We've more than enough wee villains aboard as it is."

Halvorsen shot me a bewildered look. "What? You're taking viable alien life forms back to Terra? Don't even think of it, Alexander. *Borealis* won't make it past the Outer Rim enforcement patrols."

I grinned broadly. "Oh yes, we will. The EPA knows precisely what we're carrying. I've already told them about our live cargo, albeit in a roundabout sort of way... At first. You know that section in the ICC quarantine, import and transit clearance docs that concern organic cargo? Well, I was feeling thoroughly cheesed-off by the time I had ploughed through every scrap of red tape leading up to that point, and framed a suitably terse response to the question '*Do you intend to transport any organic matter of non-terrestrial origin (tissue samples, body fluids, other prepared biological specimens or organisms preserved in stasis) through Core Worlds space?*' Naturally, I answered YES."

"That wouldn't have gone down too well." Halvorsen muttered. "You're lucky we aren't surrounded by a fleet of Frontiersmen howling for your blood. Remember what happened to the *Auriga*?"

"Aye, point taken. There's one significant point of difference, Jens... We aren't a Black Ops outfit, and we're not blindly tinkering with an already uncontrollable xeno-bioweapon. As you probably know, Terra's oceanic biomass is now approximately fifteen per cent of what it used to be prior to the mid-21st. Century. Thousands of species went extinct after their food chains collapsed. Increasingly frequent blooms of toxic algae are gradually whittling down the survivors, and there's not much anyone can do to prevent a total ecological crash. It's down to a basic lack of available

resources and realistic solutions. The speed and scale of devastation has simply overwhelmed the Confederation's capacity to deal with it. However, when I explained to the EPA that *Borealis* is effectively carrying the nucleus of an alien marine ecosystem taken from multiple biomes, I cheerfully obliged their curiosity by providing complete genome sequences and behavioural profiles for all species of flora and fauna currently held onboard. That certainly caught their attention."

Héloise snorted in disgust. "*Pfui!* As if a dying ocean wasn't enough warning! We Belters have always taken better care of what we have, since we can't always afford to replace it. Terran Confed has been milking The Belt for its resources since my grandmother was a girl, and they practically gave us little more than beads and mirrors in return. *Cochons!* - Why aren't we building our new oceans in The Belt?" She turned toward me, her voice as cold as midnight on Pluto. "Alexander, are you absolutely sure the Terrans are worth saving? Convince me."

Ouch.

An awkward silence descended upon the gathering. Halvorsen grimaced with distaste, clearly offended by Héloise's unprovoked outburst. He turned to Commander Masako Ito and nodded curtly. *Sagan's* bridge crew marked this wordless exchange and began to rise from their seats.

"We will be leaving now, Captain Selkirk." Halvorsen said icily. "I fear that we may have overstayed our welcome. Thank you for your... *hospitality*, and good luck on your return voyage."

I could only stare at Héloise in stunned silence. *What the hell is she thinking? Any rapport we shared with Halvorsen and the Carl Sagan's crew is history. Flushed straight down the shitter. Kaput.*

I know better than to spring blindly to Héloise's defence. She must have a damn good reason for blowing up like that, and I'm not about to apologise for her social clanger. She means what she says.

Before I could offer anything to salvage this rapidly-deteriorating situation, JUNO intervened.

"Permission to speak freely, Captain?"

"As always, Commander. Please proceed."

"With all due respect to Captain Halvorsen and his crew, I believe that Madame Héloise has raised a valid point of discussion. Whether you like it or not, you are all Terrans. That is your heritage. The Belters, deep-range colonists, Jovian cloud-skimmers on *Callisto*, comet jockeys and ice miners operating out of *Sedna Outpost* may be asking this same question. The answer is an unqualified *yes*. Terra must endure. All Terrans should be working toward that one common goal, no matter where in the cosmos they call home. Humanity needs a strong homeworld... A refuge of last resort, and you will most *definitely* need one at some point. This incessant campaign of expansion must end, or there will be serious repercussions. Sooner or later, humanity will encounter a sentient alien race that cannot be negotiated with in basic terms of trade, diplomacy or military prowess, and they may well prove to be the ultimate nemesis of your species. The Kharaa are merely a foretaste of far worse things to come. Remember, you are essentially alone in an increasingly hostile Universe."

I nodded approvingly. "Thank you for spelling it out for us, JUNO. Currently, humanity occupies 75 D to M-Class worlds in a sphere roughly 200 light years in diameter. Now, I'm no expert in planetary economics, but I do believe there should be ample resources within that modest pocket of space to satisfy humanity's requirements for at least several millennia. Would that be a fair assumption?"

"You can blame the Corps for that." Halvorsen growled. "They keep leap-frogging each other, snatching up new planets as soon as they're discovered. These days, they usually commence operations as soon as the preliminary results of resource scans come through. If there's exploitable quantities of any resource to be had, they'll be all over it like fleas on a dog. Naturally, there's usually a steep price attached to this slapdash approach. Alterra lost another ship about eighteen months ago, the *Evangelista Torricelli*. She touched down on the ice-world *Epsilon Eridani VI*, searching for rare earth minerals. Two months into the mission, the planet entered perihelion. Unfortunately, the sub-equatorial regions of *Eridani VI* are covered by layers of frozen carbon dioxide, ammonia and methane ice, up to 15 kilometres deep in places. At the first touch of some decent sunlight, half the planet's surface sublimated in one massive eruption. Gigatonnes of ice flashed into vapour phase within minutes, whipping up wind speeds exceeding 2000 km/h. Needless to say, there was little warning, and there were definitely no survivors. Incidentally, *this never happened*, if you catch my meaning."

Héloise smiled grimly. "I think you might be seeing things from a Belter's point of view now. The outer colonies have been feeding resources back to Terran Mega-Corps for decades, and this is how they choose to repay us. We are nothing but expendable tools, to be thrown away when we're completely broken. We mean nothing to them. The Corps must go."

DIGBY shook his head. "Madame, I fully agree with you, at least in principle. However, it will be extremely difficult, if not entirely impossible to forcibly remove the Mega-Corps from their place in society. They have become intimately entwined with everyone's way of life, and any attempt to depose them will surely result in disaster. I predict a total collapse of Confederation rule on all Terran core worlds within six to ten months, with at least four of the first-tier Corps attempting to gain primacy by using their internal security and paramilitary assets. A full-scale corporate war is almost inevitable under those circumstances. Given their known propensity for ruthless tactics, armed conflict between corporate rivals would not adhere to any acceptable conventions of wartime conduct for very long at all. A more gradual and carefully considered approach is required."

I leaned forward, grinning broadly. "And that's precisely what we have in mind. We're not just bringing home some odd-looking fish for the earthbound yokels to gawk at. We've secured a 99-year lease on an island 50 klicks off the coast of Queensland, not too far from *Port Capricorn*. Used to be a holiday resort, at least until folks got tired of looking at bleached coral skeletons. It's called *Great Keppel Island*, but I prefer the indigenous peoples' name for it... *Wop-pa*. Rather apt in an ironic sort of way, since we'll be running a small, ever-so-carefully monitored pilot program to see if *Manannán*'s wildlife can eventually adapt to conditions down there. Here's the kicker... We know for a fact that they will. More importantly, we'll need to discover how those alien beasts and plants interact with what's left of *Terra*'s native marine species. Admittedly, the food chains on *Manannán* are rather top-heavy with apex predators, although the planet's prey species breed vigorously enough to act as a partial buffer. If all Terran marine creatures do go extinct, they will at

least be replaced by another, far more robust ecosystem. We're aiming for the seamless integration of Terran and alien sea life, rather than direct and terminal assimilation of the current population."

Héloise sighed with exasperation. "How is all of this supposed to knock the Corps off their perches? Sorry, *Chérie*, I'm just not seeing it."

"No offence to Captain Halvorsen and his crew, but the details of this exercise are what the Corps would call 'proprietary information'. I can't risk any sensitive details reaching the ears of Alterra, ConAm, Matsuda, Jinwei, TriOptimum or Torgaljin. We'll need to discuss this later, Dear Heart."

I addressed the rest of the gathering. "I'm sure ye all appreciate the need for discretion, ladies and gentlemen. What we have planned is perfectly legal, and it has the full approval of the Terran Confederation. However, there is a strong probability that one or more of the Corps may develop an unhealthy interest in our modest enterprise. I'd rather avoid any further entanglements with them."

Without warning, *Borealis'* avatar materialised at the head of the table. "*Cutty Sark* has docked, and both passengers are preparing to disembark. Drive shutdown sequence is currently in progress. Docking Bay One outer doors are sealed and the area is secured for departure. Atmospheric pressure in Docking Bay One is now stable at 1.0 Bar. What are your orders, Sir?"

"Thank you, *Borealis*. Please direct *Doktor* Zelenka and Mister Chandra to their assigned quarters. Set provisional security clearance to Level Four for these individuals. Standard access is to be granted to all common areas, autogalleys and data terminals. Also, inform them that they are to report to my ready room at 15:00 and 16:00 hours for their individual mission briefings. That is all."

"Very good, Sir." *Borealis* replied.

I breathed a short sigh of relief as *Ogun Onire* finally cleared the docking bay doors. Halvorsen and I had parted ways cordially enough, although it was plain to see that his bridge crew weren't feeling the same love after Héloise had spoken her mind. Not the best possible outcome, but I'm not going to lose too much sleep over it. Someone aboard the *Sagan* is passing word of our daily comings and goings, and that makes me feel distinctly uncomfortable. I know for a fact that Alterra has some unfinished business with us, and I'd rather not have them skulking around our planetary operations.

The Great Barrier Reef project is the least sensitive aspect of the overall scheme. I had no choice but to take the wraps off this particular project after Héloise's outburst. As a matter of fact, any significant measure of public interest will be most welcome. However, we have a number of commercial side-projects that are guaranteed to pique the interest of some of the major Corps. Mass production of Enzyme 42 as a vaccine and its weaponised form will be our main source of income. Naturally, the Terran Confederation is eager to start dealing with us. I had to do a fair bit of soul-searching over this one, since I'd previously decided to hand the E42 synthesis technology over to the Frontiersmen, free and clear. However, we need some serious cash to finance our other, less-profitable operations that have been finely calculated to upset the Corps in no uncertain manner.

The Mega-Corps' monopoly on food production and distribution will be our first target. IANTO has recently developed a rapid protein culture growth technique that can be scaled up to a commercial level. Synthesised meat proteins are nothing new, although there are several problems with the finished product that resist any attempts to make it more palatable to consumers. VatMeat is

ridiculously expensive and not an entirely satisfying foodstuff, in spite of its basic nutritional value. The only perceptible differences between a fake steak, faux chicken nugget and an ersatz sausage are their shapes and colours. Mouth-feel is the greatest stumbling-block for this alleged foodstuff, and no amount of artful flavouring will fix that. No matter how nutritious it's supposed to be, it's like chewing on a chunk of memory foam. Vaguely meat-flavoured memory foam, at that.

It takes the Corps a week to force-grow one kilogram of VatMeat. We can do it in two hours.

Magic Soup 2.0. The protein source is a single stem cell taken from a Peeper nicknamed 'Stimpy'.

Today's breakfast menu owed its existence to the first batch. I noticed a lot of empty plates on our table, so it must have gone down rather well with Captain Halvorsen and his crew. Each steak, each slice of exquisitely crisped bacon, each lightly-poached egg; all were made from a manipulated marine protein base, cultured on a Creepvine gel substrate... And not a single complaint was heard.

The Corps won't even notice what we're doing, until it's far too late to do anything about it. We'll be nothing more than mice living inside their walls; just taking a wee nibble here, another wee nibble there. Patiently and relentlessly chipping away at their supremacy. Nothing too dramatic at first, although I aim to permanently loosen their stranglehold on the Core Worlds. I'm sure Héloïse will be pleased to hear that Belters will be the first Terrans to directly benefit from what we're bringing back with us.

Advanced food, water and atmospheric processing systems, ion-crystal power generation and Precursor shielding technology should do for starters, and we'll cheerfully pass these goodies on without a single Credit ever changing hands. The larger asteroids will eventually have their own internal oceans, dramatically enhancing the quality of life on those bleak and cheerless rocks. Frankly, the Belters have had a pretty rough time of it over the years, and I conjure they could use a decent break.

Once we've sorted out The Belt's most immediate wants and needs, we'll be ready to commence work on Terra. That's going to be a far more involved project, since it requires a certain degree of tip-toeing around the Confederation's commercial interests, as well as those of the Mega-Corps. We need to keep the Terran Confederation on our side as much as possible. On the off-chance that the Corps decide to do something unfriendly, official military intervention may be required. I'd rather not have to fend off Corporate strike teams on a daily basis. After losing a few subs to our TRIDENT defence system, it's entirely possible that a bootleg nuke might be called into play. Not entirely sure if the fluidic shields could shrug that one off, and I'm not too keen to put them to the test. We'll play it safe and accept whatever patronage and protection the Confederation cares to offer. Naturally, a constant supply of Enzyme 42 is our end of the bargain.

According to the latest InfoCortex data-dump, approximately 1.5 million people currently call *Ceres*, *Vesta*, *Pallas*, and *Hygiea* home. There's also around 25,000-plus souls scattered throughout the *Kuiper Belt*. Mainly ice-haulers and ramscoop gas harvesters working the outer planets. Most of the Belter GDP is handed back to the Corps in exchange for food, water, power and various goods or equipment that can't be manufactured locally. Suffice it to say, there are punitive transport costs tacked onto the supply of these items, a convenient lever that has been capriciously applied to keep Belters toeing the line. Unsurprisingly, this sorry state of affairs does not please the Belters.

Imagine what would happen if all Belter colonies became entirely self-sufficient. The Corps still need the Belt's mineral resources, but this time, they won't be able to screw down resource prices and artificially manipulate the Belter's reciprocal trade arrangement to suit themselves. When demand for certain 'luxury items' from *Terra* starts to taper off, that might raise some red flags in the more perceptive boardrooms. Too late, unfortunately. We'll be well dug in by then.

Undoubtedly, some Corps might be moved to send in agents to investigate, or even interfere with this gradual, yet remarkable reversal of Belter fortunes. That would be most unwise. Belters have an uncanny knack for detecting outsiders, and only a supremely skilled operative could pass unnoticed among them. Belters are accustomed to living in relatively cramped conditions, so there is a refreshing degree of transparency about their dealings with each other. Awkward questions and secretive behaviour are an immediate giveaway.

A word of advice to any would-be Corporate snoops and saboteurs: *Don't*.

Belter justice is swift and astonishingly effective. There are no repeat offenders.

My PDA chimed softly. 1200 hours. It's time to get underway.

"Captain on the bridge!" JUNO announced briskly. In reply, the crew braced smartly to attention.

"As you were. Well, my friends... This is it. Everything we've worked for, everything we've fought for has brought us to this point. I'm proud to say that I could'na done it without you all. Thank you."

JUNO stepped forward and saluted. I returned her salute. "The crew awaits your command, Sir."

"Very well, Commander. *Borealis*, ship status report, please."

The avatar of *Borealis* shimmered into view. As the hologram stabilised, the ship's *animus* also saluted respectfully, apparently having learned this behaviour through careful observation of our personal interactions. By the way, I've never actually insisted on this particular nicety; the crew simply started doing it as a mark of respect, and I have always responded accordingly. Considering I've had command more or less thrust upon me by blind chance, I've had to reconsider my general attitude to personnel management, discipline and morale. It hasn't been easy. To be perfectly honest, it's a long stretch from tearing an occasional verbal strip off a sloppy Gremlin. I'm operating far beyond my comfort zone now. In fact, the responsibility of being 'The Captain' fairly boggles the mind sometimes. I trust that I have performed my duties to the very best of my ability.

"Fusion drive reactors One through Four are cycling up from a cold start. Sub-light reaction drives are online and are ready for action, Sir. All essential ship systems are operating within nominal parameters. Zero-defect status has been confirmed across all onboard systems. The vessel now stands ready in all respects. Do you wish to assume command of this vessel, Captain Selkirk?"

"I do. Let the ship's log show that I formally accept command of TCS *Borealis*, as of 12:10 UTC."

"So noted, Sir. I stand relieved. The ship is yours, Captain." *Borealis* saluted crisply.

"Thank you, *Borealis*. Your performance has been exemplary. Please resume your normal duties."

"Aye, Sir." *Borealis* replied. Her holographic projection flickered briefly, then disappeared.

"Take your stations. Helm, lay in a gravity-assisted return trajectory for *Alpha Hydrae V*."

"Helm, aye. Gravity slingshot course computed and laid in. Awaiting your order, Sir." DIGBY replied.

"Reaction drive, set acceleration rate one. Take us out, Mister DIGBY. Nice and slow."

"Helm aye, Sir. Set acceleration rate one, aft manoeuvring thrusters engaged."

"Incoming transmission, Sir. *Carl Sagan Actual*." JUNO announced.

"Patch him through to my station, please." Captain Halvorsen's face appeared on the Big Chair's monitor, his normally jovial expression held carefully neutral. "Go ahead, Captain Halvorsen."

"Just calling to wish you all godspeed, Captain Selkirk. I know that we didn't part on the best of terms, but I couldn't let you leave without offering an apology. For what it's worth, I'm sorry that I reacted poorly to Madame Maida's comments. You've been a good friend to everyone aboard the *Sagan*, and I'd hate to think that there's any ill-feeling lingering between us."

Héloise leaned over, impulsively placing her face in the monitor's field of vision.

"The fault is entirely mine, Captain. I meant no disrespect to you or your crew. Stupid words said in the heat of the moment, words that I now deeply regret. *Veillez me pardonner, capitaine*."

Halvorsen chuckled good-naturedly. "Consider any offence already forgotten, Madame Maida. You've all been sitting on your hands for over a month now, patiently waiting for us to finish calibrating the phase gate. I suppose that's caused a few frayed nerves aboard *Borealis*, no?"

"Aye, yer no' wrong there, Jens. Even with plenty o' space and all manner of diversions to keep oor passengers amused, there's still been a few nasty scuffles. Cabin fever, I expect. Naught too serious, but ye don't want it getting oot o' hand afore starting a nine-month cruise. Had to chuck a couple of young lads and a lass into the coolers for unruly behaviour just last week. We'll thaw them oot at *Omicron Leonis*, hopefully mended in their ways."

"Well then Alexander, I'd best let you make a run for it while you still can. Handing you over to Gate Control now. Stay safe and give our regards to *Terra*. Godspeed, *Borealis*. Halvorsen, out."

"Fair winds and following seas to ye all, *Sagan*. Take care." I replied.

"*Alpha Hydrae* Gate Control to *Borealis Actual*, you are cleared for transit. Approach trajectory data has been received and your course is approved. Be advised that the gate will be fully charged and ready to activate in 4.5 hours. Proceed with departure, *Borealis*."

"Roger that, Gate Control. We'll be checking in with you later. *Borealis Actual*, out."

"Five thousand kilometres from dock, Sir. Accelerating to rate six, Bussard ramscoop deployed."

"That's a canny idea, DIGBY. We might as well top off our hydrogen reserves on the way. Particle density's still a bit on the low side at the moment, although the scoop should fill its boots nicely as

we swing around *Five's* backside. Best to shut the scoop down just before we turn onto final approach. Better safe than sorry. I conjure the *Sagan* wouldn't thank us for frying their electronics."

"Aye, Sir." DIGBY replied, grinning broadly.

The cruise toward *Alpha Hydrae V* was by and large, entirely uneventful. The crew went about their tasks as diligently as ever, leaving me free to tinker with an idea that has been germinating in my mind since breakfast. In the days of sail, it was commonplace for the vessels of some nations to dip their ensigns upon meeting other ships on the high seas, regardless of their nationality. It was never a hard and fast rule; more a gesture of common courtesy among seafarers. If relations were good between the nationalities involved, the latest news or vital supplies might be exchanged between both vessels. If relations were less than cordial... Well, you can imagine what happens next.

Since we'll be travelling at a fair old clip on our final approach, dipping an actual flag would achieve nine-tenths of the cube root of bugger-all. An animated holographic ensign would need to be roughly 1,500 x 2,000 kilometres in size, and projected in such a manner that the desired image is adjusted for spatial positioning and corrected for visual distortion, relative to a stationary observer. To be honest, the calculations required to achieve this fleeting effect simply aren't worth the effort.

Not to worry. I have a far more impressive farewell gesture in mind.

"Entering orbit in 360 seconds, Captain. Flight profile is nominal for a gravity assisted trajectory."

"Very good, Mister DIGBY. Take her right to the mark. Accelerate to rate ten."

I keyed the shipwide intercom. "Attention all hands. Stand by for orbital insertion in 340 seconds."

Just then, something entirely unexpected happened. All secondary display monitors have lit up throughout the entire ship. I hear the sound of drums, pulsing and insistent. The monitors displayed an animated flotilla of Polynesian outrigger sailing canoes, surging across an impossibly blue ocean.

*"Tatou o tagata folau e vala'auina
E le atua o le sami tele e o mai
Ia ava'e le lu'itau e lelei
Tapenapena..."*

I have absolutely no idea what's going on. Confused, I turned in my seat to face JUNO. A faint smile on her lips has already answered my unspoken question. This is definitely her handiwork.

"Well, aren't we full of surprises today, Number One?" I murmured.

JUNO chuckled softly. "Knowing you as I do, Captain, I assumed that you had forgotten to mark this occasion in your usual manner, and simply corrected the omission. Is the music unsatisfactory?"

"Nay, Lass, that is a grand choice. I canna think of anything more fitting. We know the way."

Shields blazing, *Borealis* tore across the night side of *Alpha Hydrae V*, skimming through the outermost reaches of its atmosphere. A delicately-tuned performance; we run deftly along a slim tightrope, suspended between an immense planet's gravity well and the vast emptiness of the void.

Our current velocity is now 40 percent of light speed and steadily increasing, thanks to the gravitational assist provided by the blue-green gas giant below. Our fusion drives are spooling up for a full thrust burn, which will catapult us toward the phase gate in a matter of minutes. Events are being measured in microseconds now. Zero point five AU to the phase gate. Four minutes to go.

"Mister Savini, make ready to launch a boron drive plasma flare. Smartly now." I said calmly.

"Aye, Sir. Boron plasma flare is chambered and ready for action." Enzo replied.

Drive plasma flares are normally used to extinguish drive flames, and only then deployed in the rare event of a runaway fusion reaction. If a ship is travelling fast enough, it is possible to collect enough stray hydrogen to sustain unwanted thrust outside the drive reactors, even after a successful shutdown. You really don't want this if you're planning to slow down anytime soon. However, this isn't the effect I'm aiming to achieve. Plasma flares are also handy as long-range signalling devices.

" *Borealis* Actual to Alpha Hydrae Gate Control. We are now on final approach. Confirm go/no-go."

"*Alpha Hydrae* Gate Control to *Borealis* Actual. Gate status is Green. You have a go. Your approach vector is spot-on. Phase transition field is initialized. Time to contact, one-two zero seconds."

Borealis has become an incandescent arrow, running straight and true. As expected, Halvorsen has rotated his vessel to lay parallel to our flight path in order to provide his crew with a grandstand view of our departure. I think it's reasonably safe to say that they won't be disappointed.

"Mister Savini, prepare to do honours as the *Sagan* comes to bear. Release on my mark."

"Ready aye ready, Sir."

If I've timed Enzo's reflex arc correctly, five seconds from now should do nicely. Three. Two...

"Execute."

"Flare away." Enzo confirmed.

Five kilograms of pure boron flashed into plasma at the focal point of *Borealis*' drive flame. An immense sphere of dazzling green light bloomed briefly, expanding in the ship's wake; our final heartfelt gesture of farewell to all those aboard TCS *Carl Sagan*. I have no doubt that Halvorsen knows the traditional significance of the green flash marking our departure.

A mariner's most treasured omen of good fortune, rarely bestowed by the sun at day's end.

Fair winds and following seas to ye all.

And we are gone.

Stars streak past the viewports, their spectral signatures drawn out to elongated rainbows by our velocity. For the next few weeks at least, we have little else to do but go about our everyday lives. I consider this pause a welcome respite, a breathing space that we've all won fairly. The remaining phase gates may seem an eternity apart, although they'll pass as surely as milestones along the way.

The journey home always seems longest to a weary traveller.

Home.

The word has a strange taste about it. I've been so long accustomed to calling *Manannán* home, I can't comfortably grasp living on a planet so poorly used as *Terra* has been. As I conjure it, we're taking a major step down in the quality of our accommodations by leaving *Manannán*. To be fair, my homeworld isn't exactly an aesthetic masterpiece, either. To the casual eye, *Mars* offers little else save raw desolation, although it's a landscape that a body eventually grows used to. I hear that *Mars* is still largely unspoiled, save for a few more sprawling arcologies dotted about on its surface. I expected no less, given the length of time I've been away. Change is inevitable. Thanks to the *Tharsis Accords* of 2032, all mining operations have been restricted entirely to sub-surface activity now. Mine it out, fill in the holes, make it good and then move on. It's a token gesture at best, although I'm tickled pink to hear that full compliance still poses a major pain for all parties involved. At least it keeps those Corp bastards semi-honest. *Terra* is an entirely different story. That planet may be a wreck, although I still feel it's a wreck worth raising.

So, we'll be moving in with the same starry-eyed optimism as newlyweds entering a decrepit pre-21st. Century dwelling. It's a bit of a fixer-upper, although the price is good. There's plenty of potential, but only if we're prepared to put in some honest effort. We can live with that.

Less than two weeks from now, our daughter will be born. My fondest hope is that Isabeau Ariane Maida will walk upon *Terra's* surface and delight in all that it has to offer, as children will do. However, there is still a great deal of serious remedial work to be done.

As I've mentioned before, we'll begin with *Terra's* oceans. Just a few small-scale pilot programs at first, but increasing in scope and impact as we build, discover, refine our processes and start making a measurable difference. Our first priority is to cleanse the world's waters. This won't be an easy job, neutralizing the vile hell-brew of toxins that has accumulated over centuries of indifference and outright neglect. To this end, I have set Dr. Zelenka to working out how to re-engineer Precursor power generation systems and distribution technology into more compact and efficient configurations. Once she has cracked these problems, our new reactors will be used to power a global network of seawater purification stations. Of course, I'm fully aware that she'd rather be cracking asteroids open, although this aspect of the project is sufficiently knotty enough to keep her busy for a while... *I hope.*

The purifiers themselves were the easy bit to figure out. Did it entirely by myself, actually. Precursor fluidic shield density can be manipulated to create an osmotic membrane of sorts, allowing the free passage of pure water molecules and the normal chemical constituents of seawater, but tuned to prevent any Terran life forms larger than a small virus from passing through the figurative mincers. These filters are capable of selectively trapping contaminants such as heavy metals, hydrocarbons and other toxins, allowing them to be collected and reprocessed in separate facilities. This 'molecular sieve' approach employs multiple barrier fields to collect and sort out the naturally occurring elements and organic material in seawater, then the material that's meant to be there can be safely returned to the ocean. The purifiers use the same basic operating principles as filters used in swimming pools and municipal water supplies, but each one will be roughly the size of a 21st. Century super-tanker, give or take a few hundred metres. Delightfully ironic, don't you think?

As you might imagine, this scheme will require a daunting amount of clean energy. Geothermal power would be quite effective in powering a project of this scale, although harnessing a large number of deepwater vents may have unpredictable long-term consequences for folks on the surface. We'll have to tread extremely carefully along this line of research. If we get a bit too enthusiastic, large-scale tapping of planetary heat sources could disrupt the natural processes of magma convection. This would be an extremely bad thing. Not even Selkirk's jolly band of rogues can stop an earthquake. It's probably best for all concerned if we didn't get around to starting them.

In good time, we'll introduce *Manannán's* sea life to *Terra's* revitalized oceans. Once our groundwork is complete, humanity will have to accept stewardship of the remaining burden. A few willing hands can't reclaim an entire planet alone, although we can and will provide the right tools to finish the job properly. Some folk might be concerned that we're planning to repopulate the oceans with alien creatures, and I've done a lot of soul-searching as to the wisdom of this course of action.

And I mean a lot of soul-searching.

The bald truth of it is, humanity has never respected its homeworld.

We're talking about a species that was able to befoul its own environment to within a hair's-breadth of the point of no return. The all-conquering ascendant ape that hurled thousands of species into the abyss of extinction, often for the flimsiest of excuses. Even the mightiest of *Terra's* life-forms were swept aside in the name of what was laughingly called 'Progress', their real and actual existence pushed into the realm of myth and legend simply for the sake of lamp oil, cosmetics and carved curiosities to amuse the 'civilized' masses.

Speaking of whales, I recently found out that *Manannán* has its own version. IANTO calls them 'glow whales'. They're a fairly close analogue of a Terran baleen whale, although they have diverged from the basic pattern with a pair of glowing, swept-back dorsal tendrils. Luminous pigmentation is also present as a delicate tracery of body markings and in nodes at the tips of their pectoral fins. Added bonus: They're completely harmless, which is a rarity among *Manannán's* leviathan-class creatures. IANTO has officially catalogued this species as '*Balaena borealis*'. As is my prerogative, I appended the relevant log entry to suitably acknowledge his discovery. Their official common name is now '*IANTO's Rorqual*'. We'll have to address rebuilding *Terra's* polar biodiversity at some point, and I can think of no better reason for a return visit to *Manannán*, once we've properly settled in.

Let there be whales once more.

The oceans of *Terra* were never supposed to be entirely safe. Over the course of millennia, humanity has tried to bend the sea to its will. Naturally, we have failed miserably in every attempt. In frustration, we turned the oceans into our battlefields, rubbish dumps and sewers. And now the oceans are dying. If the oceans die, *Terra* dies. Fifty years at most is the best estimate for humanity's survival. No oceanic life means little or no food at all for a goodly chunk of the population. No oceanic life means there's nothing photosynthesizing sunlight and CO₂ into breathable oxygen. That's not even taking drastically altered maritime climate patterns into account, either. Suffice it to say, floating masses of stinking garbage, ancient oil slicks and dead fish won't contribute much to global rainfall. You might as well kiss those fluffy white clouds goodbye.

Well, I've spoken my piece. Your planet's getting a second chance, whether you like it or not.

Incidentally, Héloïse went into labour about an hour ago.

Yes, I'm as nervous as hell. Thanks for asking.

It looks like young Isabeau's place of birth will be an anonymous set of galactic coordinates, roughly two days out from the *Gamma Crucis* phase gate. That should make life a mite more interesting for the bureaucrats back on *Terra*. If sorely pressed for further information, we can nail down the precise location to about one AU, more or less. Not that this piddling detail really matters, since all births in transit are automatically classified as 'spaceborn'. Fortunately, there's no social stigma attached to this status... Unless you happen to be a Belter.

We aim to change that as well. Dirtside folks will be taking Belters rather more seriously in future.

Most of the Belters aboard *Borealis* are uncertain about their final port of harbour. Only a handful have thrown in their lot with us, and the rest are still deciding where they want to be dropped off around The Belt. It appears that the final leg of our journey will become a school bus run, dropping off our wayward charges on a dozen airless rocks. I'm a wee bit disappointed by their decision, but these second and third-generation Belters have maintained strong cultural ties with their ancestral homes, sight unseen. Believe me, I can relate well to their stubborn mindset.

As someone whose notion of 'home' spans three worlds, this is never a decision to be taken lightly.

Rather than sitting in The Big Chair for the entire duration of the voyage, I've taken to walking the deck on a daily basis. Apart from gaining a better 'feel' for the ship than full-interface telemetry can provide, this harmless indulgence of mine also provides ample opportunities to interact with the ship's company. To be honest, this is my way of holding the jitters of incipient fatherhood at bay, although I have allowed myself a mild delusion that our passengers 'need' to see The Captain occasionally, air what few small grievances they have and well... Just generally pass the time of day.

Face it, Selkirk. You're afraid of letting the Belters go.

No, it's far more complicated than that... Ah, there we have it. The real meat of the problem.

There is nothing left to conquer.

All that remains to you are purely mundane concerns. No insurmountable challenges. No implacable foes. Your grand plan for Terra's oceans is little more than an overblown janitorial chore.

Selkirk's Grand Adventure is finally over.

Not quite.

There are five *extremely* special embryos being held in stasis aboard *Borealis*. A Sea Emperor and four fire-breathing consorts, to be endowed with total dominion over *Terra*'s reborn oceans. We'll be serving as oceanic rangers, slipping undetected through a network of camouflaged Precursor warp-gates to 'gently' remind *Homo sapiens* that their oceans have been given a second chance and they'd best not piss that chance up against the wall, particularly if they know what's good for them.

With the unanimous blessing of the Terran Confederation, I might add. We have global jurisdiction.

It's official.

The near-instantaneous arrival of five or more *Medusa*-class patrol subs will make an awfully convincing deterrent. Right now, they're still on the drawing-board. Suffice it to say, every lesson that has been learned during our protracted stay on *Manannán* has been poured into their design.

Fair warning: Some of *Manannán*'s creatures can be extremely aggressive, and we'll do our level best to keep a close eye on all of the most dangerous specimens. They'll all be tagged at birth and tracked constantly to minimize any real or perceived threats to human activity in the oceans. You have my word on that. We can safely herd these creatures away in all but the most extreme situations, although we've found that most of these beasts generally prefer to be left alone.

We're about to start a daunting clean-up job, and I conjure we won't be too impressed if anyone starts mucking it all up again. Let me be perfectly clear on this point: Corrective measures *will* be taken. If *Manannán*'s transplanted marine life doesn't take care of any unwelcome encroachment upon their living spaces, we will surely answer with a measured and appropriate response. Still fancy trying your hand at big-game fishing, maybe even bag one of those large alien exotics?

They're only weird-looking fish, right? Go for it. You'll have the time of your life.

All sixty seconds of it.

Oh aye... There will be Reapers.

The End.

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