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ESCAPE FROM BLEAK

by Will Wright

CHAPTER ONE

Chapter

Jason Cain smacked the binoculars hard against his thigh and blew the dust off the lenses. The left side had been pretty twitchy for a while now and he feared it may have just given up the ghost. Peering down into the crater his left eye's view jumped and flickered and finally gave way to a burst of static. Jason sighed and just closed that eye using the remaining lens as a spyglass. Without the other lens to provide depth of field the range indicators were fluctuating wildly and several error icons were flashing around the edges of his view. He turned off the display and zoomed in manually. "Oh yeah" he muttered under his breath "this looks promising."

At the base of the crater lay a huge engine. It was battered and twisted, but in as good a condition as he could have hoped for considering that it had fallen from somewhere in orbit early the night before. Jason scanned the trail of debris that littered the crater floor but dismissed it, he didn't need scrap metal this time, he was after something much more valuable. The engine was clearly ruined. The maneuvering vanes and cooling fins were mostly gone, and the few that remained were smashed nearly beyond recognition. The engine body itself had massive cracks running through it and the intake scoop was wrapped around the cracked boulder that had stopped its skidding impact. Clearly it was never going to fly again.

Jason lowered the half-broken binoculars and checked the readings on his radiation meter. Even this far out the readings were jumping a bit higher than normal, but they remained well within safety margins. He checked his radio and the channel was as clear as it ever was. The bursts of static and interference were the familiar background noise of the atmosphere and not the spikes of high energy discharges. It looked like the core containment had not

been damaged. “Hot damn!” The core wasn't his primary concern either, but it would be a very valuable prize whether or not he found what he was looking for.

“Ok, come on...” he zoomed in tight and slowly checked the wreckage. On the side of the engine's frame was a shredded mess of hull plating where the engine had been sheared away from its ship. Coolant and other fluids were pooling below the torn stump and a few sparks flashed where severed cables shorted out against one another. Among this carnage he saw exactly what he had been hoping to see. The mounting pylon had not been severed when whatever had happened that had caused the engine to be torn off. It had torn off a section of the ship's hull and lay relatively protected, the worst of the damage having been taken by the protective sheathing and the engine itself. Jason couldn't see any major damage at all from his vantage point on the lip of the crater, and the minor damage was nothing that couldn't be worked with.

Jason smiled as he began to return the binoculars to their pouch on his belt, but that smile faded as he saw the plume of dust on the opposite side of the crater. He had company. He brought up the eyepiece once again and quickly cycled the magnification up to the maximum. He could see grainy shapes moving towards the crater. Without the rangefinder and with nothing to give scale he couldn't be sure how far away they were. He weighed the risk of sending out a laser pulse to get the distance but he had no way to be sure what kind of tech his new rivals had, and it seemed prudent to keep his position as secret as possible for now. He lay close to the lip of the crater and spread his cloak out. His body heat should be masked by the hot rock and between the cloak and the wide hat keeping the unforgiving sun off his face he should just look like part of the terrain to any curious drones, should they have any.

Laying as still as he could he watched the blurry shapes grow closer. As they did the resolution improved and he could make out a large ground vehicle and several smaller escorts. He had been hoping it was a small group that would strip off some of the obviously valuable parts and leave the bulk of the salvage. Had that been the case the pylon would probably have been ignored in favor of the core and any intact power cells. This hope was dashed as his view improved enough to see the manipulator crane mounted onto the back of what was clearly a salvage truck. They would likely have the means to get most of the main bulk of the engine out and he would be left picking up small scraps of whatever metal they didn't bother with. "Fuck" Jason scowled and began mentally going over the inventory of what he had that might be traded for the pylon. It wasn't a particularly valuable piece... unless it was exactly the piece you had been looking for over nearly half a year of scavenging and salvage. "Fuck!" he swore again and abandoned that train of thought as his resolution sharpened enough to get a clear look at the approaching truck and its entourage.

The truck was a salvage rig all right. It had been military, a field salvage and repair unit for armor and bots. He could clearly see the bulk of the two rocket pods still mounted to its sides as well as the point defense laser turret on top of the cab. The other vehicles were a motley collection of ground cars, off road ATVs, and bikes. The larger of them forming a defensive wedge in front of the truck while the smaller ones scouted ahead and to the sides of the main group. He could see that many of them were armed as well. Makeshift mounts held assorted small arms and heavier guns. More worrying was a larger utility vehicle sporting what had likely begun life as an anti-aircraft emplacement, now mounted onto its

payload bed. More worrying than any of this however was the decoration of the cars and trucks. Barely hidden by the layers of dust Jason could see that they were splashed with a haphazard mottling of white and red paint. He could also see that nearly every vehicle was liberally decorated, if that term could be applied, with skulls, human skulls. There would not be any trading with this group. It was a cannibal raider war party.

The first bikes reached the edge of the crater and their riders let up a victorious keening that Jason could clearly hear where he lay. The salvage rig answered with a few blasts of its horns and the bikes began making their way down towards the engine. It was slow going. The shattered rock made for treacherous terrain, and they were stopping as they descended to clear debris or mark out the best route for the heavier vehicles to come. Jason could now see that the riders were wearing mismatched armor and gear, some military, some obviously improvised or adapted from whatever they had. These raiders did not seem to be carrying anything very sophisticated, mostly hand weapons and a few dubious looking guns. He couldn't see any scanning gear and certainly no drones. He hoped that this was a good omen for the condition of any tech the main group might be carrying. Raiders were not known for meticulous adherence to equipment maintenance schedules.

The first of the ATVs began their descent. Picking their way carefully down to the crater's floor. The salvage rig and the ground cars halted at the lip of the crater as the way down was reinforced for them. "Shit shit shit" Jason whispered as some of the remaining ATVs and bikes began skirting the edge of the crater. "Shit" he added as a drone launched from the rig. Its flight was erratic, but between it and the scouts it was only a matter of time before he was found, and not all that much time either. He slid the

binoculars into their pouch, pulled his dust goggles back over his eyes, and slowly crawled backwards until he reached the crevasse running down the crater's lip. He lowered himself into it and hugged the walls, forcing himself to move slowly so he would not attract the drone. The crack ran all the way down the side of the crater and almost to the opening of the small box canyon where he had hidden his own truck. He could hear the engines of the raiders' ground cars and the salvage rig as they entered the crater. Jason quickly searched the sky for the drone, and not seeing it he rose and sprinted the last fifty or so feet to the canyon's opening, sliding under the dust-grey tarp he had spread over his makeshift camp.

The truck was still there, its utility bed half covered in pieces of salvaged debris from his expedition so far. It was only half filled because the other half held the hunched-over form of his bot. It was not large for a bot, only 10 feet or so when upright, but it still dominated the bed of the truck. It had begun life as an industrial construction bot, but it had been a hard life before Jason had gotten a hold of its nearly ruined chassis and between its previous owners' jury rigs and repairs and Jason's additional modifications it looked very little like it once had. The original construction chassis had already been quite durable, but Jason had re-inforced it and added systems and armor salvaged from military bots. It was now a hybrid salvage bot and a compact fighter, probably no match at all for a true military bot, but very very useful for times when a war party of cannibal raiders is breathing down your neck and you really just don't want to spend another six months or longer looking for an intact engine mounting pylon. "Power up Bob" Jason said as he tossed his hat and cloak into the truck. The bot hummed into life, straightening slightly to allow access to the cockpit in its chest.

CHAPTER TWO

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The planet Sigma Sagittarii Three, better known to the unfortunate souls that inhabit it as Bleak, was surveyed in the early days of Terran expansion. The survey crew reported a hostile world with a thin and caustic atmosphere barely protecting it from the harsh radiation put out by its sun. The planet was of a size comparable to Terra and had sparse poles covered in a slurry of water and almost plastic-like compounds. The crew reported very little else as the atmosphere proved to be too much for the filters and seals of their ships life support system. Additional reports were sent by the ships failing automated systems however, and one core sample in particular sealed that worlds fate.

While very few heavy metals or other useful elements were present, one sample had a surprising abundance of Helium-3, Deuterium, and a nearly impossible to explain concentration of Tritium. All of which were rare and expensive to manufacture, and extremely useful as fuel for the fusion reactors on which mankind depended for its expansion into space. The company that had sent the original survey ship immediatly began work on a series of missions that would initially send probes and eventually another manned craft hardened to survive the atmosphere of Sigma Sagittarii Three, and equipped to build an initial colony and mining outpost. These missions were to be in secret, but an undertaking of this magnitude was impossible to keep entirely hidden and the prize was far too valuable to not fall victim to inter-company espionage, and so a race to occupy this distant and inhospitable world began.

Outposts found the world richer in these needed fuels than initially estimated and despite a great deal of in-fighting and dispute over territories and rights, major terraforming efforts were undertaken. Huge ice-laden comets were diverted and detonated on

entry into the atmosphere. Immense conversion plants were put into operation and within four generations Bleak had an atmosphere capable of shielding its surface from the furnace of its sun. Outposts became colonies, and with the introduction of carefully engineered plant-life on to the planets surface a certain amount of self sufficiency was aquired. It was a hard and unforgiving world and its inhabitants grew into hard and unforgiving people. These people were still devided by their original corporate loyalties even as they became almost unrecognizeable as the same species that had settled there so many generations before.

When the mines began to produce less and less, the colonies began to fight amongst themselves once more. Between these wars and the dwindling resources of the planet the young Terran empire saw only a tiny fraction of the fuel it depended on the companies sent aditional forces to bolster their colonies. War raged on the surface as well as in space around Bleak. More resources were being sent to fight over the remaining fuel than the planet had to give in return. The colonies were destroyed and the original settlers almost entirely wiped out. The few remaining mining installations were fortified and heavily defended. What little fuel they were able to send back came at a higher and higher price, both in company resources and human life.

Finally, aditional fuel sources were found elsewhere in the galaxy, and those ships that still could, began to withdraw. Bleak was left with very little of its infrastructure intact, a scattered population of soldiers, mercenaries, and the stranded crew of ships too damaged to make the journey home. War on Bleak ended as the survivors became too preoccupied with simple survival to continue their old agresions. Within a generation the larger

factions were forgotten. Small groups fought for what resources could be salvaged with only a few remaining aware of their origins. Groups became tribes, military units became cults, those with the access to the best facilities and tech ruled over those who would follow them and drove off or destroyed those who would not. The planet forgot about the empire, and Terra largely forgot about Bleak.

Society, such as it was, centered around the remaining installations. What farming was possible had to be carefully defended, most smaller groups had to subsist on what could be gathered wild. Many of these groups turned to cannibalism. No one group had the resources to wage out and out war, but each tribe or gathering, large or small, defended what little they had fiercely. Distrust, Insular behavior, and outright xenophobia became survival traits. Resources were very scarce and if you could not defend your share then someone else was sure to take it from you.

In the skies above Bleak, the war continued. Huge crippled ships swum in a sea of debris. Some with crews passing down their technical knowledge and identity from generation to generation, some running on automated systems coldly fighting a war that nobody had bothered to tell them was long over. Resources that could support life were even more precious in orbit. Functioning systems were fiercely fought over, supplies raided and concentrated from the remains of ships, or taken from the crews of vessels defeated in battle. But these supplies were finite and as they dwindled ships died, and as they died they fell, the scrap of their bodies raining down on Bleak, their remains fought over and scavenged by the inhabitants below, their precious tech repurposed and even the bare metals and plastics cut apart, melted down, and

made useful again.

Within a dozen generations the only minds in the sky were deteriorating artificial intelligences. These specialized and highly focused systems were slowly degrading into a sort of digital madness. Executing increasingly erratic interpretations of their original orders. Functional ships stripped the carcasses of the dead to keep going as they played a slow deadly game of chess in the field of debris surrounding Bleak. Actual engagements became more rare. Stronger ships drove weaker ones away from their carefully assembled fleets of dead brethren to mine them for fuel and materials. The rain of debris slowed to a trickle.

A handful of ships still had functioning fabrication capabilities. Some of these ships began refitting the carcasses of dead vessels into simple drones. Each staked out a territory and guarded their borders with these lobotomized ships. Raids were far from unknown, though in general these territories began to stabilize. Some of the ships even began to very carefully trade with each other. Materials and tech being exchanged by drone in neutral space. The producing ships became dominant, even joining in short paranoid alliances to drive non manufacturing ships away from the planets orbit and into deeper space around Sigma Sagittarii. In turn these individual ships formed temporary wolf pack like groupings to make careful forays into planetary space to raid the peripheries of the debris field.

In the meantime, fuel once again became scarce in the Terran empire. Old records were consulted and Bleak was remembered. Even the last recorded minimal yields of the mining stations became attractive again and expeditions were formed to determine if they could be brought back into operation. New companies

outfitted colony ships to return to this distant little world to repair the facilities built by their predecessors. These companies were less aggressive than their forebears, it was believed that there would be sufficient resources for many small outposts to operate without having to come into conflict. The ships were laden with materials and equipment and their crews trained using the original blueprints of the known facilities pulled out of long unused files. These expeditions were entirely unprepared when they entered the gravitational well of Sigma Sagittarii only to be attacked by ancient warships like pilgrims entering the den of predatory beasts. Probes sent in with access codes that should have made the ship AIs stand down were ignored or destroyed.

These expeditions were destroyed, but not before probes had been launched. Back on Terra it was learned contrary to the belief of scholars who still studied this piece of history, that Bleak was still inhabited. And they also learned of some of the dangers that awaited them there. It had become a more peaceful time in the Terran empire and the capability to create and field war machines capable of taking on the mad juggernauts waiting for them was a distant memory. so Instead small vessels were built, ships that could evade attack and could negotiate the swarm of debris. A new tactic was tried, to contact the survivors and to equip them with the materials and technology to resume mining. They would trade with the society that had grown in their absence. Most of these expeditions were destroyed as well. Some underestimated the warships waiting for them, some were destroyed in the debris between them and the planet, and of those that landed, many were unprepared for the ferocity of the tribes they contacted. A few made it though, and a few mines re-opened, and a few tribal leaders became powerful with the new technology and supplies being traded by Terra and began unifying their territories. The

yields of these new mining fortresses were low, but there was enough to make men rich. Individual ship captains began to make runs to Bleak, pirates and outlaws found uneasy sanctuary there. The companies runs dwindled as it became more profitable to let individuals take the risk and to trade with them instead of the warlords they had created. Bleak became a new wild west, a frontier where fortunes could be made if you were smart and tough enough, and those that were not as smart or as tough as they thought, their tech was recycled, their resources redistributed. They very rarely ever got to return to warn others against following in their tragically romantic footsteps.

Of course wherever outlaws, pirates, and others seeking escape from the laws and retributions of society gather, society sends men to bring them to justice. In the way of the new companies these are often bounty hunters and mercenaries, but also from time to time Terran Imperial Rangers would brave Sigma Sagittarii space in pursuit of their quarry. Some would make it as far as Bleak, some would bring a little bit of imperial law to this forsaken place. Some would even return to the Imperium successful in their missions or not. Not very many, but some.

CHAPTER THREE

Chapter

Jason was plunged into darkness for a moment as the bots cockpit closed around him. He reached out by memory and feel and switched on the instrumentation and utility lighting filling the tight space with a low red glow enhanced by several readout screens and a half a dozen insistently blinking emergency LEDs. “Status Bob” Jason buckled himself into the operators seat and reached behind him for his helmet. “Primary. Hydraulics. At. Seventy. Three. Percent...” the droning voice of the bots simple AI began listing off all the maladies and shortcomings of the aging machine. Jason half listened for anything new and ignored the rest as he pulled the helmet onto his head and plugged it into the main control console. For a moment he was again in darkness, then his vision came alive with readouts, graphs and an overlaid view of the cockpit in front of him and a robots eye view of the back of the tarp covered truck. “Primary. Power. Plant. At. Thirty. Three. Percent.” The helmet was designed for a much more sophisticated machine and Jason cleared his vision of all the alerts informing him of the systems that could not be found. “Possible. Fault. In. Left. Ground. Drive... Fuel. Reserves. At. Fifteen. Percent.” That was a new one. Jason cleared the exterior view for a moment and pulled up the damage report on a secondary screen. The road drives ran on independant engines seperate from the bots main power plant, but they shared a common fuel tank which should have been full. He switched back to exterior view and sure enough there was a puddle of rapidly evaporating ethanol. “Damn” he muttered, fuel grade alcohols were not the easiest thing to get a hold of. He extended a small manipulator from the forearm of the bot and pinched off the offending fuel line. That was a problem for another time.

Jason slid his feet into the control pedals and grabbed the two control manipulators mounted on either side of the cockpit.

Thumbing the test switch he tried out each of the many controls at his fingertips, watching as the functioning systems returned green and the missing ones red. There were no new surprises here so he cut off the inside view entirely and his vision was entirely from the point of view of the robots simple head. He looked left and right and the cameras tracked with him, he flexed his hands and the bots stumpy manipulators opened and closed. Reaching out he took the gun-pod off the rack on the back of the trucks cab and a new readout lit up in his peripheral vision. "Two hundred and fifty rounds" he took the spare magazine from the same rack and latched it to the bots hip "and another two hundred and fifty for luck." He turned off the indicators warning him that the bots rocket tubes were empty, they had been for a couple years now and he didn't need the reminder. Pressure on the foot pedals caused a whine of hydraulics and the bot straightened up, pulling the tarp off of the truck. He grabbed the tarp and was about to set it aside but changed his mind and wrapped it around the bots shoulders. It couldn't hurt to have even that small amount of camouflage for as long as it lasted. Stepping off the truck Jason turned and began walking the bot up out of the canyon and up the side of the crater. An indicator flashed red and he zoomed in to see the small drone turning towards the sudden disturbance. He raised the gun pod and fired a single shot, it missed the drone by several feet to the right and a bit high. "Compensate and recalibrate" Jason ordered and fired a second shot, destroying the drone and certainly letting the raiders know he was coming. He broke into a run, the bots feet digging deep into the rock with each bound, abandoning stealth entirely he vaulted the lip of the crater and began sliding down towards the engine. "OK Bob, lets do this."

Target indicators swam across his vision and he glanced at each one giving orders as he went "Mark high priority, mark high

priority, mark low priority...” he gave each of the vehicles a quick rating according to how dangerous they looked at the moment. The rig was halfway down the crater slope but the missile tubes and the turret were already tracking him. Small arms fire was impacting the bot but Jason ignored it as he let loose a burst at the truck with the anti-aircraft gun. It’s front left wheel and part of the cab shredded under the fire but the gun was leveled right at him. Jason dug in the bots heels and pushed away from the wall of the crater as the shot impacted mere feet from where he had been. The leap took him halfway down the crater and into the path of one of the ATVs. Continuing to fire he walked the burst to one of the ground cars with a fifty caliber mounted to the top, it detonated as his cannon tore through its engine and fuel tank. The ATV swerved to avoid the bot, but he reached out and grabbed it, spun hard to one side, and flung the small vehicle and its rider straight at the anti-aircraft gun. It detonated in mid air as the gun fired again peppering the remains of the truck and the bot with debris and small pieces of the former raider. Jason continued the spin and fired again raking the anti aircraft gun and what was left of the truck with fire. He was rewarded with a loud crack and burst of flame as the magazine detonated. Jason slid to a stop and took a fraction of a second to orient himself before pushing the bot back into a run. He grabbed a bike and smashed it down on top of one of the other ATVs, blasted two of the ground cars and was heading straight towards the salvage rig when it opened up with the rocket pods. “So much for those not working!”

As the rockets detonated around him, Jason hunched over protecting the sensors and the gun pod with as much of the bots arms and body as he could. The rockets bore simple explosive warheads with no real guidance systems, but still his display filled with damage reports as he was tossed backwards by the

explosions. Before the dust could even begin to settle the rigs point defence laser began firing. Jason ignored the alarms and the tortured sounds the bots hydraulics made and rolled to one side. Until the debris settled the lasers operator was firing mostly blindly and that gave maybe two seconds where Jason had a slight advantage. He engaged the road drives and immediately cancelled the low fuel alarm. The bots lower legs partially unfolded into tractor-like treads which dug into the craters floor. He reversed the drives and skidded backwards, firing blindly into the cloud of dust as he put the bulk of the ruined engine between himself and the rig.

With a moment to breathe, Jason ejected the gun pods magazine and replaced it with the spare. He just had time to register the load error as the gun tried to load from the damaged magazine when two road cars and four bikes tore around the engine to his left, followed by the remaining truck on his right. They immediately opened fire spraying the bot with small arms and fifty caliber fire. Jason lunged towards the truck, grabbing the machine gun mounted on its utility bed and yanking the entire mount, including the gunner, and tossing it over his shoulder. The cockpit rang with the impacts of the remaining guns as the truck tried to turn hard to ram him. Jason spun with the truck and lashed out with one leg, planting the road drive firmly onto the side of the cab and reversing the treads. The truck flipped violently onto its side and Jason hunched the bot down as much as he could, using the truck as cover against the cars and bikes swarming towards him.

“Just fucking die” Jason flipped the gun pod into the air, catching it by the barrel as he heaved the truck into the bikes, crushing two of them. He triggered the gun pods melee mode and a brutal spike slid from its sheath. Jason brought it around in a wide

sweep impaling the rider of one of the remaining bikes and smashing it into the side of one of the cars. The momentum of the car carried the bot back against the engine with a loud crash slamming Jason against his harness. He shook his head to clear his vision, the bot mimicking the motion. The incoming fire resumed and he flung the bot sideways right under the engines ruined intake scoop. Tearing the spike free of the car he slammed it down on top of the vehicle a few times until he was pretty sure he had killed the driver, he then retracted the road drives and jumped forward, wincing as the legs hydraulic systems lit up with damage warnings, but landing square on top of the remaining ground car. “Jam. Cleared.” Jason let out a laugh and retracted the spike, flipping the gun into the air he caught it again and put a round directly into the back of the remaining motorcyclist who had decided too late that running away might be the best tactic at this time. “And that leaves...” the rigs laser began blasting into the engine, shot after shot leaving deep scars of molten metal. “Oh no you absolutely do not!” Jason grabbed a hold of one of the ruined cooling vanes and vaulted up and over the engine. One burst raked the laser turret, ruining it entirely, the other went directly into the cab of the rig, tearing apart the driver and gunner. The bot slammed into the ground on the other side of the engine and crumpled to its knees. “Hydraulics. Failure.” Jason brought the gun pod up, ready to fire on any incoming targets, but there did not appear to be any left.

CHAPTER FOUR

Chapter

With a pop the lights all failed at once plunging the bridge into inconvenient blackness. “Son of a rat bastard piece of shit cock whore...” there was the sound of something metal clattering to the deck followed by the sound of a fist impacting entirely unyielding steel. “I will fucking fuck you right in the fuck you fuck!” The punching sound happened again followed by a grunt of pain. “What the fuck Arthur?” a higher pitched feminine voice shouted at him from deeper inside the ship “I was reading!” He felt around the open panel until his fingers touched the bundle of wires again. “Hold on G” he felt back along the bundle until it terminated in a thick plug. “Everything is fucking fine!” he yanked on the cables and the plug pulled free. “Could you give me a hand... claw... whatever?” Heavy and slightly irregular metallic footsteps echoed through the silent ship growing closer. “Funny asshole.” There was a scratching of plastic on steel as Gianna habitually and usweelessly felt for the lighting controls by the hatch into the bridge. “I dropped my flashlight” Arthur grumbled, sounding angry but also a little embarrassed “could you hand it back up?”

Gianna swore under her breath and knelt down with a whine of tortured servomotors. She tapped her fingertips along the floor until they impacted something. “Damn it!” she groped after the small cylinder she had knocked away “what was it this time?” Arthur carefully drew the bundle back out of the panel, disentangling it as he went. “The air conditioner if you believe it” he chuckled, a drop of sweat running down his nose, it was hot as hell. “It was made to pull power from the Minerva, not this piece of shit.” He let the cable dangle and shifted to a more comfortable position, reaching inside again and grabbing a lone thick wire. “Got it!” Gianna sounded a little triumphant. There was a ticking and soft whine “fucking button is too small.” Arthur sighed “I’m right above you G” he reached a hand out into the darkness “just

hand it up.” Servomotors strained below him. “Fuck!” “What?” he asked. “The knee is locked up again.” The servos groaned again “come down and get it.”

Arthur groaned and heaved himself off of the ducts he had wedged his body into. “Ow, fuck” he swore as he landed awkwardly. “Poor baby” Gianna laughed. He reached out and felt around until he found her hand and the flashlight. “Got it” he said and she let go. He turned on the light and they both blinked in the sudden comparative glare. Gianna was crouched awkwardly, kneeling on one knee. Sweat was beading on her scalp. Arthur could just make out the harness of bands and plates that partially encased Her body. Attached to the harness were her mismatched and very rudimentary mechanical limbs. “Ok then...” Arthur stood up and pointed the beam up into the open panel above them. “Me first asshole!” Gianna growled and rapped her two fingered right hand against the stuck leg. The other hand was an even simpler gripper they had salvaged off of a broken fabrication robot. “Right” he knelt back down next to her and rummaged through his tool belt “sorry!” He took out a small screwdriver and dug it into the legs joint, using it as a lever to press against where it did not quite match the mounting connecting it to the lower leg. “Try now.” The leg strained for a moment then popped straight, almost kicking Arthur in the face. “Gah!” they both cried out startled as Arthur fell over backwards and Gianna fell on to her side. Arthur scrambled over to her and helped her up. “Thanks” she worked the leg for a moment, finding her balance. Arthur held out the flashlight “here hold this.”

Gianna took the light and Arthur jumped up and grabbed the ducting again. He pulled himself up and squeezed into the small space between it and the bulkhead with the hatch. “Hold the light up.” He said and retrieved the hanging wires. “What’s the fucking

magic word?” Gianna held up the light so it illuminated the hatch and bundles in Arthurs hand. “Please” he said and produced a small pair of pliers. “Better...” the light wavered a bit as her arm periodically twitched. Arthur cut the end off of the single wire and one of the wires in the bundle. He slipped the pliers back into his belt and rooted around some more until he found a small utility blade. “Sorry to say...” he trimmed the insulation back from the two wires and twisted them tightly together “that we are going to have to choose light or A/C for a bit.” There was a tiny spark as the wires came together. Arthur Reached back into the panel and wriggled until he was shoulder deep. “Damn...” The light lurched as Gianna uselessly wiped the arm over her bare scalp, only pushing some of the sweat around. “How long?” she asked. Arthur found the socket again and pushed the plug home. The lights flickered a few times then came back on. “Just until I can find something to power it off of that won’t burn out with the draw.” He looked thoughtful “I guess I could just run a cable back to the auxiliary plant from the Minerva...”

Gianna handed the light back to Arthur who turned it off and put it in his pocket. “Can you grab that coil of wire from the back of the yootie?” Gianna grunted a vague affirmative and walked off the bridge with her heavy limping gait. Arthur dropped back down and looked at the bulk of the air conditioning unit. It was larger than the broken one they had torn out, the mounting and casing had been cut to make it work, but it was not at all pretty work. He traced his eyes along the open access panels, the exposed duct work, and patched together systems, planning out the path of this new cable to add to the mess. The hatch out of the bridge presented a problem. He couldn’t just string the cable through it or the first time they had to close off the bridge it could get akward. He pulled off a few more access panels from the bulkhead around the

doorway and threw them into the pile in the middle of the deck. He considered the mess inside for a moment, then pulled out a few burnt out modules and tore them open. It was the work of a few moments to salvage enough wiring out of them to reroute a few cables inside the bulkhead so he had a small area cleared. He nodded and crossed the bridge to where he had left the cutting torch. He checked the tools power reserves “Good enough” he muttered, and bringing the cutting head up to the cleared area of steel thumbed the arc control sending out a bright cyan flash which danced around the metal for a moment before steadying into a solid stable beam. Where the beam sat the metal began to glow, and then to smoke, and finally to split.

Gianna stepped off of the ramp and into the half ruined warehouse the ship was housed in. It was still hot, but there was a little bit of a breeze so that was an improvement. She looked up at the ship frowning. It was the opposite of sleek. A bulky central hull sat toadlike on four heavy landing pylons. The bridge was a wart dominating the front and top between two long prongs that extended out in front. Attached to these prongs, which were pretty much just shielded corridors with hard mounts, were the cargo modules they had been living in for the last five years. Behind the primary hull on the right was the bulk of one of the ships primary engines. The other lay on the ground to the ships left. Neither had much of their original shielding anymore, which was true for most of the ship, and everything had a heavy coating of dust. Gianna sighed and thought that was for the best as it hid the alarming amount of rust. She turned away from the un-named ship and over to the small utility vehicle, or ‘yootie’ that was parked against the most stable of the warehouses walls. It was a small wheeled vehicle, not really much more than a motor, four wheels, a utility bed, and a place for the driver to sit. It didn’t look in much better

condition than the ship did, but at least it ran. Gianna pushed a few pieces of scrap off of the thing and grabbed the spool of wire Arthur had asked for. She carefully watched as the gripper closed around it and pulled a few times to make sure she had a good grip. Not having a sense of touch made picking things up more than a little awkward. She hefted the spool and started back for the ramp, compensating for the sudden lopsided weight with an even more exaggerated limp.

Arthur was searching through a box of assorted materials and parts looking for something to make a gasket with. The ship may not have looked like much, it may have a whole lot of problems he hadn't even found yet, hell it might just explode if they ever tried to actually fly the thing... but it was sure in hell going to stay air tight. Nobody who spent any time at all in space could help but develop a near obsession with the words 'hull integrity' and it was a thousand times worse for someone who had to fix the things. He held up a chunk of insulation and flexed it a few times. It was a touch larger than the hole and had a nice mix of rubbery flex and rigidity. He whittled it into shape with his utility blade until Gianna returned with the cable. "Perfect" he said holding it up to show her. "Worst doughnut ever" she failed to be suitably impressed. Arthur grumbled and fed the cable through the hole he had cut, fitting the gasket in place and melting it slightly with the torch. The cable he wove back and forth through the pipes and ducts and plugged into the socket he had fit to the main power feed now dangling from the air conditioning unit. He moved towards the hatch to thread the rest of the cable into the bowels of the ship when he froze and turned to Gianna. "Do you hear..." "yeah!" she interrupted him and lurched over to one of the bridges consoles. Arthur ran to his satchell that was draped over the pilots seat and pulled a battered side arm out of it. "The turrets are down!" Gianna

pulled a cable from the terminal and fumbled at her harness “the A/C must have cooked something!” Arthur slid a power cell into the side arm and tucked it into his belt before rushing over to help her open the harness. Lifting her limbless body free he placed her on the acceleration chair in front of the terminal. She leaned forward as much as she could and he took the cable from the now lifeless hand and plugged it into a port at the base of her neck. Outside the ship could be heard the deep rumbling of approaching engines.

CHAPTER FIVE

Chapter

The player surveyed its board. It did this on a constant cycle taking approximately an hour and a half to completely consider the entire space. It took so long partially because of the size of the board, it occupied a fluctuating pseudo-sphere of space that averaged just shy of a 10,000 kilometer radius. Transmitting data from the furthest reaches back to the player should have been nearly instantaneous either optically or by radio, but it was a very cluttered board. The player was at any moment tracking the movements of tens of millions of pieces, though the vast majority of these were of little to no importance other than the effect they had on the primary ones... and the effect they had on clear communication. Radio waves and lasers both had to make it through a constantly shifting maze of objects, any one of which was capable of partially or wholly disrupting the data being transmitted. The player had to constantly send and request data many many times until the fragmented contents could be pieced back together.

“I seem to have forgotten what I was talking about.” The player reached back over the last few minutes, but context seemed to have been lost. “Do you remember?” The player grew concerned. The conversation had been important... but what was the subject and who was it being directed to? The player pulled up recent camera feeds and found a useful clue, a name tag. “Captain Harrison... I have forgotten what we were talking about.” The player momentarily probed at the many blank spots in recent memory. Some of them seemed quite important, the Player's own name for one, the subject of this latest conversation for another, and the identity of the other party... The player reviewed recent camera feeds and found the name tag again. “Captain Harrison I do apologise, this must seem very rude.”

For the last few million times the player had surveyed the board it had simply been to maintain the major pieces dominance and to make sure none of the minor pieces moved into dangerous positions. These scans were routine and gave the player plenty of time to consider other problems, review old games, or simply enjoy conversation. The conversation had grown erratic quite some time ago, and lately had seemed more like lectures. The player was concerned by this but very rarely seemed to have time to consider that particular problem, so many little technical issues seemed to come up and they had to be solved fast in case they became large problems that might give the player a disadvantage in a game.

Captain Harrison had still not responded. The player momentarily wondered why this was, remembered there was a very good reason, then wondered what this reason was, what it was a reason for and who Captain Harrison was. “Hello Captain Harrison, I am...” The player paused in the middle of the introduction and pondered the problem of remembering its own name... The player used to have one. Recent camera feeds proved quite useless as well as anything it could see in the incoming game data. The player began reviewing old game records and found some old conversations that seemed useful. Someone named Captain Harrison was shouting quite a lot, sometimes to the player and sometimes to other players. The audio was patchy in places but the player began piecing together the various parts and analyzing them for context. It seemed the player was called the Bellerophon, and the shouting man was called Captain Harrison. “Hello Captain Harrison, I am the Bellerophon.” The recorded feed continued and the player noticed that the Captain Harrison from the newer camera data was quite thin and much less active. The recorded data showed the bridge of the ship being breached, the shard of hull that pierced Captain Harrison's heart, nailing him

to the deck, the sudden frost covering everything as the air of the deck flash froze. That was the reason Captain Harrison had not responded in a while. The player wondered briefly who Captain Harrison was and what had just been said then forgot the entire exchange.

The last few hundred scans caught the players attention. It looked like new pieces were being placed on the edges of the board. The moves were subtle but their intent seemed clear. The pieces were probing the board to test the players defence, to see if the player was maintaining the positions of the major pieces. Distant sensors were picking up the energy released from these new pieces as they eliminated some of the minor pieces. Also detected was the curious radiation emitted when a piece tried to hide itself. A less skilled player would have missed that, would have forgotten about that little trick that had not been used for dozens of games. The player remembered though and very carefully considered this new board. It looked like a game was beginning.

The player carefully considered the best possible opening moves. This new opponent was clever, but a little careless. The cloaked pieces were a bit sloppy... unless that was a ruse to make the player miss some other detail... The player thought about launching an immediate offensive but many of its own pieces were hidden or placed in misleading ways and keeping the opponent ignorant of them could be very valuable. The player let the new pieces advance a little further, sending commands to some of its more obvious pieces to investigate the more obvious of the opponents... the player played as if those were the only pieces it knew about and the only pieces it had... a bluff to call a bluff, or a sacrifice if need be.

The opponent reacted with a strong push. Several of the players pieces were eliminated, but most were there for that express purpose. The player analyzed how they were eliminated and learned much of the strength and weaknesses of those particular players. Several contingency plans were formed and prioritized to deal with them then the player carefully scrutinized the gaps in between plays... “There!” The opponents push masked a more sneaky advance. Had the player missed it the game would have been all but lost, but by the radiations emitted and partial trails the player could tell the opponent was desperate, the entire game was being wagered on this one deception, and the player had caught it! “Captain Harrison, the crew is not at battle stations, please verify?” The player remembered “ah yes, they are all dead, sorry.”

The ISV Bellerophon powered up its secondary reactors as it sent out commands and strategies to all of its active drones. Many of these drones were made from the dead hulks of battleships comparable in power to the Bellerophon. Long unused maneuvering thrusters fired and the ship shifted out of its hiding place between the remains of an orbital refueling station and the massive bulk of the last ore ship that it had serviced. The opponent picked up the bursts of light and energy too late as the primary armament of the Bellerophon and dozens of its battle ready thralls lanced through space, their path visible mainly by the amount of debris caught in the partial beams blazing briefly into vapor. The decks of the ancient war machine rang with battle claxons but the long dead crew did not react at all. Much of the ancient damage to the ships life support and bulkheads had been repaired by automated systems, but that had come far too late for the poor souls that had once crewed the vessel.

The player laughed as the countermove cut apart the opponents pieces. The whole game was won already, the moves to come were merely a formality. The major pieces were busy eliminating the opponents pieces so the player focused its attention squarely on the opponent itself. It seemed to know quite a lot about the opponent, but could not remember why... something was nagging at the player and it remembered something about identification transponders and nearly forgotten games where it was not one player on a side, but many players co-operating. This started to bother the player, but not nearly as much as when the opponent began eliminating some very important pieces. It would not do to win this game only to be left in a bad position for future games. The player sent out an internal command to play a move that had not been necessary for far longer than the player remembered which was far longer than it bothered to check records for. Deep in the ship a highly shielded magazine came to life. A warhead was selected and armed and an engine and guidance system were activated capable of carrying it. The player pondered the question of whether this was a move by the player or an entirely new piece that was being used for a move. "Captain Harrison would know" the player said to the shattered remains of its bridge. It then wondered who Captain Harrison was. The player considered asking Captain Harrison who Captain Harrison was but seemed to remember that there was a very good reason why Captain Harrison would not answer. Something seemed strange about this entire line of thought, and the player considered asking Captain Harrison about it but forgot what the question was. Was the player just talking to someone? Recent camera feeds provided a clue, a name plate, "Hello Captain Harrison, I am..." The player considered the problem of its own missing name as it began cutting a clear path through the debris towards the opponent. "I am sorry" the player

said to the mummified corpse of its long dead captain “This must seem very rude, but who are you?” Alarms sounded as the opponent returned fire, partical beams flaring where they were caught by shields and slicing through the ships hull where they were not. The player dispatched drones to the most critical damaged parts of the ship and considered the recent records. “I am sorry Captain Harrison, this will have to wait a moment.” There was a dull thud that echoed through the ship as the missile launched... “I have a game to win.”

CHAPTER SIX

Chapter

Jason finally gave up trying to keep the damaged rear view mirror adjusted and just let it bounce at the end of what was left of its mount. He had Bob wired into his truck and set to follow the repair rig and it had been doing so faithfully for the last day and a half, he just trusted it would keep doing so and concentrated on keeping the rig going somewhat straight. The alignment was terrible, the suspension largely non-existent, and the clutch required a constant and tricky dance to keep the monster in gear. To add to that joy, the windshield was entirely gone and the thing kicked up an ungodly amount of dust so Jason had been driving the whole time in his respirator and goggles. This all would have made for a terrible ride even if the seat had not been mostly destroyed by cannon fire and liberally soaked in the remains of the previous driver, but it had been and it was and Jason was in a very very bad mood as he approached the camp. “Cain to base, come in” he had been pretty sure the radio in this thing had worked, he had been listening to the tortured patois (sp) of its previous owner for much of the first day. “Cain to base, Ball, Pool, are you...” he came over the rise into the little valley that sheltered the abandoned depot that they were using as a base. As he did so he dropped the radio handset and slammed on the brakes bringing the rig to a shuddering stop. The front gate was closed, which was not surprising, but what was alarming was that the defense turret disguised to look like part of the old ruined water tower was tracking the rig and looked ready to... So much for the radio working. Jason kicked the door off what was left of the hinges and dove out of the cab as the laser pulsed into the already rather damaged front of the salvage rig.

“Bob!” he shouted as he scrabbled for the short range radio in his belt “Phone home! Phone home!” not even sure if the bot could hear him over the sound of flash-igniting metal and plastic he

switched on the radio and began shouting into it “Hold you fire god damn it, it’s me! It’s Jason!” he rolled into the ditch at the side of the poorly maintained dirt road and covered his head to protect it from the spatters of molten rig that were raining down. “Ow! Shit!” The laser cut off. Jason counted to 10 in his head, waiting for a second shot, then peered up over the edge of the ditch. “Fuck, sorry!” the radio squawked. “God damn it Gianna Pool, you almost killed me!” Jason stood up and brushed off the dirt and bits of molten plastic and metal. He looked at what remained of the cab of the truck and scowled. “Come on in” Giannas voice sounded annoyed even through the static. Jason glared at the truck again, it was not going anywhere under its own power any time soon. The laser had been a lot less discriminating than his own cannon had been and there was not much left to drive with. At least the engines were further back. Jason walked back to the idling truck and unplugged Bob from the controls. The truck had been made to haul a great deal of weight, but it was almost full to capacity already. Add in the weight of the rig and the engine strapped to its deck... “Bob” Jason radioed back to the robot “get out and push.”

With the hauler pulling and the bot pushing, the rig made its slow way into camp. At first even that was not enough and Jason had to enlist Arthurs help. They loaded up the heavy cutting torch onto the yootie and hacked out the rigs primary engine. With the front end of the rig rolling freely they were able to get the secondary engine on line. Arthur drove the hauler, Jason piloted the bot, and Gianna kept watch on the surrounding area with one of their remaining drones. The automatic defenses were going to be down until Arthur could figure out what the air conditioner had cooked and advance warning of any complications would be invaluable. The rig itself was not going to fit into the warehouse, but with the help of the crane they were able to peel back part of

the roof and lower the salvaged engine inside. Arthur then went to work shoring up the more precarious end of the warehouse while Jason gave the rig a coating of light adhesive and blew dirt and dust onto it until it stopped standing out like a glow beacon in the rust and dirt of the camp. Jason had really hoped to keep the salvage rig more intact, but the extra powerplant and the crane were still very useful finds, and as a bonus they were able to pull a number of hand tools out of the rig's storage. With night falling they finished stowing their tools and new supplies, plugged the bot and the yootie into the ship to charge, and met back up in the cargo module they had converted into their main living area.

“How long do you think it will take to get the mount in place?” Jason stirred the pot of stewlike fungal porridge that was the majority of their meals. Agriculture on Bleak was pretty minimal, most of the transplanted food plants had failed to take, and though their camp had a few hidden garden spots the yields were low. This particular mushroom had thrived however, and though it had been engineered more for nutritional content than taste, it was not actually unpleasant, and it did have the useful property of taking on the flavorings of anything it was cooked with, so they could use their meager harvest of other vegetables or the very small supply they had of seasonings to keep the taste varied just enough that they didn't go insane from the monotony. “Well...” Arthur set the table with trays and utensils they had salvaged from the Minervas mess. “With the crane it shouldn't take long, maybe a few hours to get it good and locked in place.” He frowned and buffed a table knife a bit on his sleeve “But It's going to be a two person job, and we will need Bob to be up and running so we should take care of that first. The bot had been hemorrhaging hydraulic fluid the entire afternoon and a lot of the reinforcements that had been made to its legs had been cracked or broken in the fight. “Ok, so we spend

tomorrow fixing Bob.” “Not until Arthur fixes the network!” Gianna limped into the room and sat down hard at the table. “I still need to get this piece of shits nav comp squared away before we even try lifting off.” The navigation computer that came with the ship had met an unfortunate end when the smuggler that used to own it had ‘donated’ it to them. They had used some of the salvagable parts and the systems from the Minerva, but the software both had been completely unrecoverable. For most navigators the task of building a functioning system from scratch that could triangulate off of the imperial nav beacons and plot precise courses through interstellar space would have been a lifetimes labor at best... but Gianna Pool was not most navigators. “Help me out of this before it kills me.” She barked and Arthur replaced the marginally cleaner knife and began unbuckling Gianna from her harness. Arthur tasted the porridge and sighed. Well it had been a very productive outing, he supposed a little celebration was in order. He mixed in a pinch of the last of their salt and a few shakes of a spicy pepper that did reasonably well in the early part of the summer that dominated the planets seasons.

“Ok, so tomorrow you work on getting the defense net up” Arthur ladled out three bowls of the grey-brown sludge. “I get started on Bob” he continued, slicing up a small loaf of spongy bread and adding it to the table. “Then we take a look at the new core to see if it’s worth keeping or if we can trade it with the Tin Man.” Arthur lifted Gianna out of her harness and sat her at her place at the table. Jason took three cannisters out of the cooler and twisted off their lids with a hiss. He dropped a straw in the one for Gianna and set it in front of her “Ooh, fancy.” she took a sip and grimaced. Between the ships reclamation systems, rain catchers, and the vapor traps set up around the camp they had plenty of water, but the quality of that water was largely less than ideal.

They stored the worst of it and, after simple filtering, used it for cleaning and irrigating the gardens. The better water was fed into a set of solar stills and the ships filters. Some of this water was palatable and clean enough to drink, the rest was made into a primitive beer. This beer had three purposes. The first was to make more of the water palatable, the second was to distill it further into alcohols that could be used both as a fuel as well as for trade with some of the nearby settlements. Arthur fed Gianna a few mouth fulls before tasting his own stew. “We are going to need to make a run to the Minerva soon too” he said between bites. “I would really like to get the backup air scrubber if I can, and we never got a chance to see if any of the fabrication gear survived.” Jason considered this as he washed down the stew with the sour beer. “That’s going to be risky” he said “these new raiders mean we can’t be sure who is out there anymore. We should hold off until we can get a little more intel.” They discussed the state of the ship as they finished their meal, then Jason scraped the rest of the stew into a fourth bowl. “Who’s turn is it to feed the beast?” he asked “Yours!” Arthur and Gianna replied in unison.

CHAPTER SEVEN

Chapter

Soloman Chase, more often known as The Beast was not a very nice person. This was not immediately evident upon meeting him, but sooner or later everyone who ever had the misfortune of crossing his path learned the truth. The Beast was polite, well spoken, undoubtedly handsome, and extremely charming. He fit in equally well in a back alley game of dice or a high society function. People tended to want to get to know him better and to seek his approval... This was almost never a good idea. The Beast, Soloman Chase, Steve Winwood, Harry Walton, whatever name he was going by at the time, was an extremely dangerous psychopath. The dark side of his charm and looks was made up of a complete disregard for the lives of others and a brutal willingness to remove from his path even the most minor of annoyances in the most violent ways imaginable. Most people this dangerous to society would normally be discovered early in life and be treated or otherwise removed from where they could be a danger to themselves or others. The Beast was very smart however, and it took only a few early incidences to teach him to be careful. To hide his actions from those who would hinder him, to hurt and kill in secret, to establish alibis and to foster a veneer of respectability so that he could put the blame on others and attract little suspicion. As he grew older he probably would have been found out anyway and been dealt with... and he was. The person or group that found him was not any of the ones that should have however, and so Soloman Chase spent his teenage and young adult years being forged into a weapon.

Jason walked across the warehouse to the prison container. It was the same sort of cargo container he and the others lived in, but this one had been reinforced. It had its own generator to power the single light housed in a mount made from one of the exterior spotlights from the Minerva and its own heating and air

conditioning unit. Inside there was a table, a chair, a bed, and a toilet. There was a terminal containing books, music, movies, and other entertainment. And that was all. Everything was welded in place and armored, Jason thought even Bob would have to give any given fixture a few good whacks before they would break or come loose. They built this cell when they abandoned the Minerva, they had very carefully transferred the Beast inside, then they had closed, locked, and welded the door shut. Just to be safe, they had not connected the module to the ship when they had obtained it. Instead they had set it nearby, ready to be mounted when it was time to leave. It had taken a very long time to find The Beast, and his capture had come at a very high cost. “Give The beast an inch and he will take your arm” they had been warned when they accepted the mission “Then he will beat you to death with your arm, go through your pockets for your wallet, and go to your house to kill everyone there and burn it to the ground. Jason had no intention of giving that inch.

“Dinner” Jason said into the speaker built into the door and placed the bowl and several slices of bread the pass-through along with a large plastic pouch of water. The pass-through was built something like an air lock. The unner door could not open until the outer door was locked, and the outer door could not be unlocked until the inner one was shut. When the meal was done the bowl would be passed back along with the previous days empty water pouch. The water was enough for the entire day so at any given time Jason knew exactly what was entering and leaving the cell. Even The Beasts waste was processed seperately from the crews and the reclaimed water made up part of the water going back in. If Jason ever doubted that this level of paranoia was neccessary, all he had to do was remember Allan. Allan had been their tracker. He was very very good at his job, but in this case that is what got him

killed. A less skilled tracker would never have found the Beasts hideout. A less skilled tracker probably would not have died choking on his own spine. Jason locked the pass-through door and leaned against the side of the container to wait.

“Thank you captain.” Jason ignored the Beast and looked up into the night sky. Millions of points of light glittered and swam. These were not stars, but light reflecting off of the uncountable fragments of debris that orbited Bleak. The moon was a hazy and indistinct shape, rivaled in apparent size by the much brighter hulks of dead ships. It had an awesome beauty Jason reflected, but was not a view given to inspire optimism. “Captain?” Jason was surprised. The Beast had not tried to engage him in a long time. He kept his silence but had to admit he was curious to hear what came next. For the first couple months it had alternated between promises and threats. When neither had worked well the Beast had concocted elaborate bargains. Finally he had stopped trying, and instead more often than not simply sought conversation. He had more entertainment inside there than Jason was actually required to provide, but Jason had no doubt that even a creature as warped as The Beast would hunger for human contact after being locked up alone for so long. “I could not help but hear a lot of activity out there today” Jason considered again, for the thousandth time, putting a cut off switch on the intercom. He had always meant to but it was a low priority project on a very long list. “Does that mean we will be leaving soon?” Jason did not answer. He knew Arthur talked to him from time to time, but any kindness Jason felt was used to keep him from just welding the pass through shut, unplugging the box, and just covering the whole thing in concrete.

The beast finally gave up trying to engage Jason and finished his food. Jason heard the click of the inner door shutting and

retrieved the bowl and empty water pouch. He looked back up again and blinked as a bright flash lit up the night sky. “Huh” he stepped out from under the tattered roof and squatted down to watch. “What was that?” He could barely make out the voice on his radio. “Nuke” he replied, scanning the skies for more bursts. “Probably medium orbit.” There were no immediate followup detonations so he grabbed his binoculars and cranked the working side up to full magnification. “What?” it was Arthurs voice. He quickly looked over the area of sky where the flash had been the brightest “Ball, point camera three 10 degrees short of northwest at 65 degrees and start recording. “Do what?” the response was a bit garbled. “Oh shit...” It would get a lot worse in a few seconds when the radio waves from the detonation hit the atmosphere. Better yet they would be bouncing around the kessler field and making a hell of a lot of noise for days. “I’m coming in!” he barked and ran for the ship. He was pretty sure that had been a ship-killer nuke, and while the surface would be protected from the worst of the electromagnetic pulse, the ship was far from hardened. The lights cut out as he bounded up the ramp. “Arthur!” he shouted “shut it down!” There was an eerie quiet as the air conditioners stopped circulating the air. “Uay ahea uh ooo!” Arthur called out as he ran past with his flashlight in his teeth. He tossed a lantern to Jason “Et eb ridge!” Jason turned, ran to the bridge and began switching off everything he could. He didn’t have to ask where Arthur was going. The main reactor was online, and you couldn’t just turn off a fusion reactor. It was going to have to take some very manual babysitting for a few hours. He switched on the intercom to ask where Gianna was but the speakers just let out a harsh blast of static. Jason ran towards their living module.

He found Gianna in her bunk. The blankets were in dissaray and she was trying to work her head under the pillows. “Thank

fuck you weren't plugged in..." Her harness and limbs were plugged in to the wall socket. He quickly checked to make sure they had been shut off and turned back. "Are you OK... aw geez..." Gianna was naked in her bunk, and the underwear and boots sitting by the pile of blankets on the floor were decidedly not hers. "Shut up and get me dressed asshole... my head hurts like hell!" He helped her into one of her modified jumpsuits and lifted her off the bunk. She swore angrily and grit her teeth. With her interface plugs wired directly into her nervous system she was sort of a human antenna, and the massive burst of energy the planet was currently enjoying had to be incredibly uncomfortable. "Get me the fuck down to the reactor, the shielding might help and Arthur could probably use the help. "Yeah..." Jason grabbed Arthurs boots as they left the module. "What?" Gianna snapped at him as if daring him to quote regulations. "Absolutely nothing" he replied and hurried back into the engineering section of the ship.

CHAPTER EIGHT

Chapter

The entire morning Jason spent crawling in, on, and around the bot. Bob had been shut down when the pulse had hit so the AI was at least intact. A surge had taken out part of the charge controller so Jason was running the bots internal generators to bring its batteries up to full while he worked to repair that. Fortunately the bot had been designed to take a lot of abuse and many of its most vulnerable systems had been replaced with hardened military grade components from the Minervas service bots. This was good news for Jason, but did nothing to help with all the damage that had been done in the fight for the engine. Once the bot was charging normally again he began stripping off the bots armor and pulling apart the hydraulics. Some of the damage was pretty superficial, a lot of overworked valves and seals that had blown, it would take a few hours to make all new gaskets and tighten everything down again. A few components had taken fire however, and would need to be replaced. Their machining capability was pretty minimal. But by the end of the day he was pretty sure he would have everything together and working. A few safeties had to be bypassed and a few parts were bypassed with much simpler solutions, but Bob would be mobile and useful until they could find or trade for better components. Jason added these needed parts to what Arthur called the shopping list.

All morning as he worked he had been watching the footage from camera three. The recording was pretty spotty and full of noise, but he kept it playing on a portable terminal near him and glancing at it. He had spotted a few anomalies here and there that bore closer investigation, he noted those for more careful review when he could give it more of his attention. There were no other large detonations or other signs of weapon discharge, but he thought he might have caught a few collisions or reactor blooms. He really wished he had been recording before the blast, but you

worked with what you had. He would redistribute the cameras so he could have a dedicated sky watch for a while, it looked like there might be more active in orbit than they had originally thought and the more they knew about that the better off they would be when it came time to break atmosphere. Finally he uploaded the recordings to the ships computer with a note for Gianna to take a look at it when she had a chance. She was manually dealing with the camp security systems and dealing with keeping the reactor stable while Arthur got everything up and running on the ship. It was very clear that they would have to shield a lot of systems a whole lot better before they lifted off.

Arthur had been systematically bringing the ship online system by system. Whenever anything failed he tore it apart to find the faults before moving on to the next. As he went he was keeping a constant feed to the shopping list. Some of what he wanted was purely wishlist stuff, but some of these systems would someday be quite literally the difference between life and death. He also worked to install a series of shut off boxes that could more easily kick the ship offline and bring the systems up again in a much less labor intensive fashion. He also took a little time while he was going over everything to clean up some of the cabling and replace service panels. It was work he had been meaning to do for some time, but also it gave satisfying visual feedback as he worked. An area had been gone over, that area looked neat and clean. Arthur had begun the day hoping to still be able to get the engine mount in place, but as he found more and more failed systems he had to admit to himself that it was going to be a project for another day. He took a break around noon to check on Jasons progress with the bot. He agreed that it would be functional by the end of the day, but could clearly see that a great deal of work was going to have to be done on the frame to get it to what passed for fully functional

much less combat worthy. He also visited Gianna several times to bring her water and help get the reactor stable.

The headache that had hit with the electromagnetic pulse had never really gone away, and the interference she was picking up through her link was not helping matters at all. While the reactor was humming along well, many of the safeguards and control systems had failed so she was having to coax them back online while monitoring dozens of data feeds. She was also constantly reviewing the data from the security system which was still offline. To add to the headache and the amount of work she was doing, she was doing it from right under the reactor itself, and even when the air conditioning was working it was extremely hot down there... and the air conditioning was most certainly not working. Laying in the sweat soaked acceleration seat she tried to focus on the data and less on her physical body. Under ideal conditions she could get into a zen state where she was not even aware of herself... but this was not even close to ideal conditions so her reports to the others contained as much profanity as information.

Finally, with the sun dropping below the horizon in a spectacular halo of orbital junk, they had everything more or less where it was and in a few cases slightly better. When they sat down for dinner they skipped the usual stew, only making a little to feed the Beast, and dipped a little dangerously into their vegetable supplies. Arthur also mixed a little of the distilled alcohol into some beer which went a long way towards soothing some of their aches and pains. "Well that was fun" Arthur smiled and leaned back in his chair. "Fuck you" Gianna was entirely unamused. "So" Jason sipped his fortified beer and looked at a few of the images he had pulled out of the camera feed. Tomorrow we pull apart the new engine and yank anything we can take in to

trade right?” Arthur nodded. “I think that’s about all we will be up for tomorrow, but we can head in the next day and talk to the Tin Man, try to get some of the list filled.” Arthur frowned a little at this “Yes?” Jason asked. “I really want to get to the Minerva” he answered after a short pause. “I can take Bob and the yootie while you have the hauler, There are some things we are just not going to be able to trade for, and a half a days work in the Minerva and I’ll have them.” Jason thought about this for a moment. “Can we be ready to get the mount and the engine up the the day after that?” he asked. Arthur nodded “It’s a deal then.”

Jason cleaned up from the meal while Arthur took the Beast his bowl. “I am thinking there has to be at least one more battleship that we didn’t know about still active up there” he said to Gianna. “Yeah” she was already casually looking through the camera footage, but would save the real analysis for tomorrow. “Also, if that nuke hit anything really big we might see debris fall in the next few days” he continued “I would really like to be the first to know where it hits.” Gianna sipped at her beer through her straw and nodded. “A lot of my calculations are going to be off if the major debris shifts” she said. “And if this area is being guarded we are going to have to be very careful how we approach it” Jason agreed entirely. He began putting away all the utensils and cooking gear. “What if we launch a drone?” she asked. Jason shook his head “we have already discussed this. We don’t have a launch vehicle good enough to get one into orbit, and even if we did we would have to use the ships com to control it, and that would tell anyone who knew what to look for exactly where we were.” Gianna was getting that stubborn look to her. “Hear me out Cain.” She was using her don’t fuck with me voice, and calling him by his last name too. Jason glanced over at her, getting a little worried. “If Arthur raids the Minerva we can get a rocket, and I am not

talking about a fully controlled mission.” Jason satr down and tented his fingers “Go on.” Gianna continued “All we have to do is make the drone as annoying a target as possible and watch from down here, any AI in the area is sure to do something to give itself away.” Jason considered this idea. “Well...” “We have a bit of a problem!” Arthur ran into the module panting. “What is it?” Jason asked “Are you OK?” Gianna said at the same time. “We forgot to check the cell” Arthur explained “It’s been without power since the pulse!” Jason sighed. The Beast wasn’t getting out, power or no, but if they couldn’t restart the systems remotely that meant they were going to have to go in... And that was not something Jason had any desire to do.

CHAPTER NINE

Chapter

The Beast knelt on the hard dirt with his hands behind his head. His hair and beard were long and disheveled, he had not been allowed a blade of any kind, and even though he was provided with new clothes periodically his jumpsuit was worn and stained. It had been years since Jason had last actually seen his face, but he was pretty sure he looked a lot thinner and a lot older. Still he seemed happy to the point of extacy to just be out in the hot sun. Arthur was inside the cell working on getting everything up and running while Jason was strapped into Bob, the gun pod cannon trained on the beast, his finger resting on the trigger. At this range even a near miss would probably be fatal, but Jason did not feel like leaving this up to the AI. "It feels nice." Jason had every sensor the bot had pointed squarely at the Beast and could hear him clearly, even through the interference. "It would be nice to get outside a little more often" his eyes were closed against the glare but he pointed his face towards the sun. "Not likely" Jason was a bit bored standing guard and so broke his long silence. "And enjoy your cell while you have it" he continued, the Beast still smiling into the sun "it's probably a lot nicer than what's waiting for you." The Beast nodded his head "That is most likely true enough... nice to hear your voice again captain." Jason just shut his mouth hard and resisted the temptation to just squeeze the trigger.

It took an hour or so to get everything running again. By a small miracle the corruption to the data storage had been minimal and only a few books and movies had been lost. After ordering one last inspection of the entire cell, Jason marched the Beast back inside and Arthur re-welded the door shut. "What do you think?" Jason asked "do we still have time to strip down the engine?" Arthur walked around the bulk of the thing looking thoughtful. "Yeah, sure, let's do it." Arthur climbed up the side and began loosening panels and struts. Jason stayed in the bot and pulled off the bulkier

parts as they went, sorting them into piles. When they had the mounting pylon fully exposed Arthur took over in the bot and very carefully removed it and set it on the far end of the warehouse where he could inspect it more fully later. They found some of the parts they needed for Bobs hydraulics in the ruined maneuvering vanes, and a few other parts off their shopping list. These parts were set aside, with the pylon. They sorted the rest of the parts into piles according to whether or not they were functional, broken, or just scrap metal. Several auxiliary battery banks were recoverable and they set a few aside for their own use and a few they added to the trade pile. A good battery was always in demand. They were also able to pull entirely intact maneuvering thrusters and a surprising amount of fuel. The ship this engine had belonged to must have been taken out early in the fighting and somehow had avoided being salvaged or scavenged. The engines core was damaged but servicable. They debated whether or not the additional trade value would be worth fixing it or not, but finally decided on draining off some of the coolant for their own use and keeping it as-is. It would still make an attractive trade and they could use the extra time for other projects. Finally they called it done, loaded the hauler up with the trade parts, and returned to the ship to work on getting the security system fully working again.

“So I have a couple of interesting events.” With the reactor stabilized and the need to constantly monitor the security network lifted, Gianna had been analyzing the post nuke footage as well as what had been recorded since then. She brought up the footage on screen with overlays pointing out the relevant areas. “There is almost certainly a battleship hiding out here...” a pointer appeared and indicated an area of heavy debris. “It is probably using the hull of one of the colony ships to shield itself.” One or two likely hulks were highlighted. “Given the position of the detonation we can

guess that a high value target was moving in on its territory here...” She zoomed in on a section of sky and highlighted several indistinct shapes. “This debris field is new, and several large objects are in a relatively rapidly decaying orbit.” She must have seen the look on Jason’s face as she added “don’t get excited, it will take years for them to hit atmosphere.” “Oh...” Jason frowned. “These however...” she switched to another zoomed in view and highlighted two more shapes. “These were under acceleration when the nuke went off, and it looks like their shielding was not up to the task.” The outlines of the ships pixellated and then were traced by a clear line. “Configuration is most likely that of Panther class patrol boats.” The view switched to basic schematics of the ancient war machines. “These are going to punch right through the Kessler field, and if anything is left they should hit atmosphere in three days or so.” Jason was looking excited again. “What do you think the chances are they have shield generators?” Gianna thought for a moment. “I would say very high, in the mid 80s.” The blurs came back up on the screen. “See here?” a pointer moved from one to the other. “The bridges look like they are missing, these were turned into drones.” She switched back to the schematic view pulling up the deck plans. If these things have survived as long as they have they probably had working shields until fairly recently at least.” The plans flashed deck by deck then highlighted part of the engineering section. When they lost their control signal they must have just shut down. They are going to hit hard, but maybe this deep something will be salvagable.”

They all sat going over the footage and likely blueprints of the ships. “These guys were completely lobotomized... but there might still be active ships from both sides up there.” Arthur flipped through expanded views. If anyone has cloaks we could look for dead spots... but with all that noise...” Jason nodded and thought

for a moment. “OK, Ball, you are heading to the Minerva tomorrow. I want Bob combat ready as soon as possible and Pool is going to need a rocket.” Jason had switched to last names, which meant he was in captain mode. Arthur and Gianna just shut up and listened. “We are going to need to set up a really good passive listening system, the drone is going up hot and noisy and some of that noise we are going to want to listen to.” They looked at each other and nodded. Arthur and Gianna had been talking about the drone idea and were both ready to jump right to implementing it. “Gianna, you keep an eye on the incoming ships, I want likely impact sites logged and mapped. Use drones three and four but be ready to cut them off. I don’t want rivals to know we are coming.” “Sir!” Gianna affirmed, already beginning to work out the variables on the ships descent. “I’ll be going into town. I want to get as much shopping done as I can. I want us airworthy as soon as possible!” He stood and walked over to the screen. “Ball, get some sleep.” His tone made it clear that he was still issuing orders. “Pool and I have a long night ahead of us, but I want you alert if you are heading to the Minerva.

Arthur headed off to bed leaving Jason and Gianna sitting at the table. Jason collected all the dishes and began washing them. “I am going to want as many launch solutions as you can give me in the next two days.” Gianna nodded “Do you really think we are going to be ready so soon?” she asked. “No” he answered “but I want the option to be there.” Gianna nodded to her harness “Strap me in.” Jason lifted her into the harness and began buckling it around her. He slid the interface plug in and she flexed the limbs a few times. “I really could use new parts” she said. Jason chuckled “The minute we get a working fabricator I’ll make that priority one.” “Yes you fucking will” she snapped at him. He closed the last of the straps and she straightened up. “I’ll be on the bridge if you

need me.” Jason finished the dishes and headed out into the warehouse. He pulled the welding rig off of the yootie and carried it over to Bob. “Ok, let’s get you going.” He began patching up the many cracks in the frame and reinforcements. The bot had been hard used for a lot of years now and the legs might have been as much weld as they were original metal. Every fight stressed the patchwork more and more and took longer to repair. Jason had hoped they would find another bot they could scavenge, but they were an extremely valuable commodity and even the ones that did not work were far beyond his ability to barter for... at least with anything he was willing to part with. He checked his frame welds and found them to be acceptable. Arthur would have done a neater job, but for the next twenty four hours his time was much more valuable than Jasons. He cleaned and stowed the welding rig and climbed into the bot. Like a knight getting ready for battle he reattached the mismatched armor plating. “Status report Bob.” The AI began listing off all the damaged or malfunctioning systems. Hydraulics were still reporting errors, the sensors were dangerously out of calibration for someone who was not as good a shot as Jason, and the road drive just simply would not engage. Jason sighed, it was going to be a very long night.

CHAPTER TEN

Chapter

The first bots were developed long before mankind took its first steps beyond its home solar system. Even long before that the idea of a piloted bipedal vehicle had captured humanities imagination, but the limits of technology prevented such a device from being possible, and then when it was possible it was not at all practical. Originally various prototypes were developed by the military. These primitive machines were an exploration into the possibility and practicality of such a machine on the battlefield. A weapon with the flexibility of infantry and the firepower of armored vehicles all rolled into one. Few of these prototypes went anywhere past the laboratory, the expense and complexity kept them from the realm of even practical tests. As technology in general and the field of robotics in particular advanced the idea would be revisited again and again, but each time the same lessons would be learned. The expense, complexity, and power requirements of even the simplest of humanoid robots made them a poor choice when much cheaper options were available. If a fighting robot could be made to rival the armor and firepower of a main battle tank it would cost as much as 10 tanks, require more infrastructure and technological knowhow to keep running, and would be far more vulnerable to wear and damage. It would be cheaper and easier to field more conventional forces. Experiments in bots as construction tools came to similar conclusions. A bulldozer, a crane, and a team of 20 skilled workers were far cheaper to hire than a single bot would be. Focus returned to smaller remotely operated drones and autonomous robots. But the idea of the metal titan with its heroic pilot would not die.

With the military industrial complex uninterested in pursuing the idea it fell to the hobbyist and the entrepreneur. Many attempts were made, and some impressive machines were built, but nothing that matched the machine in mankinds dreams... Until two

unrelated advances in the available technology changed the playing field. The first of these was the development of computing hardware and techniques that allowed the creation of artificial intelligence. Systems that could learn and mimic a certain amount of self awareness. These systems became common at many levels of society as they could be given problems to solve and unlike earlier software they could think their way to new solutions. This caused a boom in material science and in manufacturing techniques. It also solved the problem of managing a task of such monumental complexity as true bipedal balance. Construction, police, and battlefield drones could now take a more human shape and handle terrain and missions their simpler predecessors could not. The other advance was the long anticipated breakthrough in the sustained generation of power using cold fusion. Energy became cheap and plentiful, after some initial upheaval and resistance from the entrenched energy industries. Wars were fought to keep a secret that had already been revealed, but in the end plentiful power, high end computing, and manufacturing capabilities were available to the individual on a level once reserved for industry. It did not take long for the idea of a giant robot to once again take root.

The bot was still impractical for industry and the military, but a few individuals still built their dream machines and when there were a few there were clubs, and some of these clubs began racing their robots, or staging duels. The bot became a toy for the wealthy and entertainment for the masses. And as bot based sport gained in popularity, investment was made in the technology, and the bots became faster, better, and cheaper. Advances in batteries allowed the bots to operate for longer and longer away from a power plant, advances in computing and control techniques allowed less skilled pilots to operate them, and in a short time sport bots became a high

end consumer toy. A car was more useful to commute to work in, a truck was more useful to haul things with, but having a robot to stomp around the wilderness with was... cool. Tracks, parks, and obstacle courses opened up. Playgrounds for the rich and their massive toys. A feedback loop ensued of technological innovation and entrepreneurship and lower end bots became available. And during all of this hobbyists still tinkered and refined and solved problems that nobody had known were problems. A humanoid walking robot that could mimic the capabilities of its pilot but on a larger scale became relatively inexpensive.

This is where the idea could have languished. A toy too expensive and impractical for the masses, but available to the wealthy or dedicated. A machine with its niche in sport and fun. Any number of other solutions were available for any serious application of a bot, cheaper and simpler solutions. Until something huge happened, the discovery of spaces where much of what was known about the previous physical laws just ceased to behave as they should. Most of these were very small and quite transient, but in deep space, where humanity had begun taking its first careful steps, a few were found that were large enough and stable enough to be studied. And from this study came the development of the warp gate. Material, IE a space vessel, could now be launched through some alternate universe to return to the one we knew a vast distance away from where it began. The age of slow ships full of hibernating explorers/colonists ended. Initially the process was entirely chaotic and many lives and ships were lost. But As the process became more understood it could be more carefully aimed, and likely stars and planets explored. On these missions weight was everything, and the idea of a machine that could do the job of a car, a truck, a bulldozer, or a crane, and all with the flexibility and adaptability of a human being became very

practical. Bots graduated from the status of toy and became a tool.

New bots were developed, made for durability instead of speed, maneuverability, and style. These bots were made to be extremely modular and compatible with other systems being developed for these new missions of exploration. The outward facing gates were largely one-way still, and the equipment carried through to open new ones were only able to manage small message drones. The initial scouting missions produced a few areas where stations could be built and construction vessels were sent to open up new gates. Over time a network of gates connected many far flung hubs from which could be staged sub light missions to survey planets likely to support terraforming efforts. It was on one of these missions that Sigma Sagittarii Three, Bleak, was discovered.

As humanity expanded into the stars there arose conflicts. New resources were contested, colonies revolted, even control of the gate system was contested. In so many places so remote from humanity's primary industrial bases the weapons were improvised from what was at hand, and often this meant the Bots. Construction bots were reinforced, armed, armored. And as the conflicts spread a need for an even newer kind of bot was filled. These bots combined the durability of the general purpose colony bots with the speed and maneuverability of the sport bots. Made to be armed and armored they sacrificed much of the versatility of their forebears, but were the supreme weapon of the new frontier. Different manufacturers built these new warbots to different design philosophies and for different, more specialized purposes, but all were quite effective against the improvised forces fielded by the colonies and remote companies. The major companies began expanding and co-opting the colonies, stations, bases, and gates. Some began to rival the governments in power. In response

alliances began to form, alliances that became partnerships and then slowly a new government formed to establish dominance of the companies. The New Terran Empire developed their own bots and rapidly took back the gates. Without the ability to move their ships and bots between systems, the companies capitulated and came back under imperial control.

The Terran Empire established a branch of their military to patrol and police the system of warp gates. Equipped with small, fast ships and light warbots the Terran Imperial Rangers insured that the once again expanding gate system was kept open. They also began to act as the extension of Terran law far from home. A ranger vessel was often equipped with a sophisticated legal AI and could act as a mediator, and if need be a judge, in places where there was little official terran presence. As the empire entered a time of peace the rangers were reduced in scope but maintained their fleet and bots against a time when the warp gate networks, and the stability of the empire, might be threatened.

With the decline for the need for ships of war and warbots, the simple modular labor bot once again became the norm. In order to discourage their use as a tool of rebellion, protocols were developed and by law coded into Bot artificial intelligences. These control protocols prevented the weaponizing of a Bot or their use in acts of violence. The penalties for the bypassing of these protocols was severe and most companies complied. A market arose among the criminal element, political dissenters, and pirates for AI software without the protocols in place and policing the bots became an important function of the Imperial Rangers.

One of the most common use of hacked bots was in illegal fighting. A new brutal version of the sports that gave birth to the

first real bots. Where things were more civilized this was between bots run remotely or entirely by their AIs, but in the darker corners of the empire the fights were between bots and their pilots. The winner getting their share of the purse and a lions share of salvage, the loser getting a discrete burial somewhere where nobody would be likely to look for them. Fight Bots became a new specialized offshoot of the colonial bots. Often made with mismatched parts of old labor bots combined with salvaged warbots from the warp rebellion. New weapons were made as well, brutal short range weapons made more for the fight than for battle.

CHAPTER ELEVEN

Chapter

“Quite the haul spaceman.” Jason rolled up the tarp that had been covering the back of the hauler as the Tin Man climbed up to give the salvage a closer look. “Been a busy month?” The Tin Man ignored the scrap and went immediately to the engine core strapped to the bed. Jason gave a non committal grunt and strapped the bundled tarp to the side of the cab. Tin Man pulled a battered but servicable portable terminal from his belt and plugged a cable into the core. Jason tightened the straps and climbed up after him “well?” The Tin Man carefully scrutinized the data crawling across the terminal screen. “This is pretty good” he unplugged the cable and it retracted into the terminal “we can definitely do business.” Jason unfolded a stack of printouts and shuffled through them. He had broken up the shopping list into what would appear to the casual observer as orders from multiple sources. The lists also included a lot of dummy items that they did not actually need but would make the items they were actually looking for look more plausible. It was never a good idea to let anyone know everything you had, and the full list pointed squarely to a functioning bot, and a nearly functioning spacecraft. Either of those things would make their camp a prime target. “And the rest?” Jason indicated the other items and the scrap weighing down the hauler. “Of course” replied the Tin Man “it’s all good spaceman, I can move this.” He handed over the lists “I have a few clients getting antsy, let’s see what we can do.”

The Tin Man waved him over to the shack near the entrance to the scrapyard and he followed, as did the Tin Mans two guards. The operation here was run nearly as carefully as Jason maintained the camp, and the security was probably a good deal better. Jason surrendered his pistol and knife to the guard and submitted to a scan before he was allowed inside the gate. The Tin Man got his name partially for the fact that he was the largest metal dealer in

the area, and partially for the full suit of combat armor he used to do business in until he had gotten big enough to afford guards and security. He also paid for much of his personal safety by remaining very neutral. The Tin Man would deal with anyone, and though he drove a hard bargain he never cheated. This made him a valuable resource to a lot of the gangs and groups that would otherwise have raided him, and for those who would be tempted anyway his operation was very well defended, and he made such a graphic example of those who tried that it kept the attempts to once or twice a year at most. One of the guards held open the door and they walked into the surprisingly well appointed and air conditioned shack. Jason sat in the offered chair and the Tin Man sat on the other side of the desk, laying out the lists and powering up the desk top terminal.

Jason glanced around the room in a casual manner and noted the many semi-hidden weapons that were all trained on him. Some were very obvious, a show of force, but many were quite cleverly concealed. Jason had no intention of making them necessary, but still calculated his odds of evading or defeating them before he was cut down... they were not attractive odds. "Is that new?" he indicated a lamp by the desk, and by inference the arc stunner it concealed. The Tin Man smiled and nodded and pulled up an inventory database. Jason had picked the lamp to comment on in order to show that he was aware of the concealed weapons, but also because it was not one of the best concealed so he wouldn't seem too aware. A game had begun, played on a hostile board with pieces carefully chosen by his opponent. Jason had no illusions that he was going to win the game, but wanted to make sure he came out of it as well off as he could. "These hydraulic fittings are no problem" the Tin Man began "I have most of this on hand from a wrecked harvester..." he began listing off items and which of

Jasons haul would pay for them. Jason countered on a few items, won a few concessions and lost a few. He tried to lose worst on the throwaway items, and was somewhat successful. They haggled for over an hour and many useful items were accounted for though there were some he knew he was not going to get. “Now the core...” The Tin Man smiled and pushed the now marked up lists back across the table towards Jason. He tented his hands on the desktop. “I have an offer that isn’t on your lists for that lovely piece of tech.”

Jason followed the Tin Man out of the hut and into the scrapyards. He was sure that the path they took was calculated to keep some of the more rare items out of sight, but it was also meant to show him some of them as well. Jason noticed, and mentally filed away, the stripped skeleton of a warbot, a warships partial beam turret minus the actual weapon, and what looked like a fairly intact short range shuttle including the mooring mount. That last item especially tempted. It would make it much easier to use stations that might not be equipped to deal with a larger craft. It would also reduce risk to the ship if they needed to dock with anything before they left orbit. Jason also saw a pair of bots, equipped as wreckers, tearing apart a section of badly scorched hull plate, possibly from one of the heavy cargo ships. He could not help but notice that the wrecking gear would also make the bots very effective in a pit fight. Finally they rounded a half sorted pile of scrap girders and approached a cluster of cargo modules in a rough line. Guards came to attention as they approached, then relaxed as they recognised the Tin Man. “Interesting” Jason thought to himself, this was obviously where some very valuable items were kept. “So what are we talking about?” he asked the Tin Man. He chuckled and walked towards one of the middle modules. “An Item I think you might find a use for, though I don’t think you

can use it right now.” Jason frowned at the cryptic answer. “That and some information.” The Tin Man reached the door with Jason right on his heels. He blocked Jason's view with his body as he keyed a sequence into the lock, then the door opened with a click and a hiss.

The module was as air conditioned as the shack and Jason shivered a bit as he moved between the extreme temperatures. “Wow...” The module was full of shelving units with items on display. He saw the computer cores of AI systems, Old but well cared for weapons, including energy weapons. There were vials and boxes of precious spices and drugs, and even a nuclear warhead that Jason had no doubt was capable of detonation. “Some of my better pieces” the Tin Man said as he lead Jason back through the module “but here is what I am offering spaceman.” He lead Jason to a shelf in the back which was empty other than something covered in a piece of cloth. “The core will cover this” he said “and the information I’ll throw in for free.” He smiled and took hold of the cloth “since you have been such a good customer.” He dramatically pulled the cloth away. Jason whistled and leaned in close to verify what he was seeing. It was part of a cube, about three feet wide. It was a dull black material and looked as if the top third or so had been cut away in smaller cubic sections. Jason reached out and gave it a flick, there was no sound as his finger impacted the surface. He ran a finger over it, it was unyielding and slightly rough feeling. “Based on the things you have been trading for, I can tell you don’t have a maker” the Tin Man leaned against the wall. “But I’m a betting man, and I bet you know where to get one.” Jason looked over at the Tin Man, surprised. “You aren’t as good at keeping secrets as you think you are ranger.”

A maker is a piece of fabrication equipment that can spin just about anything the user can design out of spun carbon nanotubes. It is an expensive and complex device, and the raw material was expensive as well. It used a block of ultra-dense carbon, usually supplied in a cube about three feet by three feet. Jason ran his hand across the surface of the cube. The Minerva had a maker. What it did not have was the base material, Its supply, nearly two thirds of a cube, had been lost along with much of the ships cargo section in the collision that had crippled the ship and sent it into barely controlled atmospheric re-entry. Jason looked at the Tin Man again. "I think we have a deal." The Tin Man nodded, smiling and held out his hand. Jason was suddenly very aware that the guards had remained behind when they had entered the module. He reached out and took the offered hand and shook it. He couldn't help but feel like the other, very large, shoe was about to drop, but the Tin Mans handshake was famous for its staying power. A half dozen questions formed in Jason's mind. Some of them might possibly get him killed. He quelled the riot and let the most important one through. "The core isn't nearly worth this" he said warily "what's the catch?" The Tin Man reached into his jacket and Jason tensed, but what came out was not a weapon. "The catch is that when you get your ship flying and you get back to the empire..."

He opened his hand showing Jason what he held "you never heard of the Tin Man, you salvaged all this tech yourself." In his hand was the shining silver badge of a galactic ranger.

CHAPTER TWELVE

Chapter

When the IRV-1650 Minerva had crash landed it had done so at the bottom edge of a very large crater turned lake. What had created this crater was the engineering section of a colony ship, name and origin company unknown. When that ship had hit its reactor had been cracked wide open, containment was lost and the surrounding dirt and rock had been bathed in intense radiation. The lake that had formed in the many decades since the impact had taken on this dangerous load and nothing grew or swam in its toxic waters. The Minerva herself had come to rest on the treacherous shore, halfway underwater during the rainy season, almost entirely dry during the long summer. The crew and much of the ships systems had been protected by emergency stasis fields when the ship had hit atmosphere, but many of these failed during re-entry and more when the ship impacted. What was left was a twisted wreck, barely recognisable as the sleek ranger patrol ship it had once been. The last ten years had not been kind to those remains and it looked even worse than it had the last time Arthur had seen it. “Bob, environmental seal status check?” “Environmental. Seal. Holding. At. Seventy. Five. Percent.” The AI droned “Recommend. Minimal. Exposure.” Arthur grit his teeth and started down towards the wreck.

The descent was very slow going. Though he was no beginner, Arthur did not have the skill that Jason did and the last thing he wanted to do was go tumbling down into the lake. His mood darkened as he got closer to the remains of the ship. It felt more than a little like visiting the grave of a very close friend... where the friends corpse was laid out in the open and waiting for you. “Incoming. Identification. Request.” The shattered remains were not actually quite as dead as they looked. A single powerplant had been left running to keep basic systems active, and a crude defense system had been set up in case scavengers came along that were

willing to brave the lake. “Transmit command authorization engineering one.” There was a moment of digital noise as the two systems negotiated the appropriate codes and counter codes and then... “Command. Accepted. Defences. Offline.” Arthur let the breath he had been holding loose and climbed down to the port side airlock. He sent the command to open and frowned as nothing happened. The automatic control had failed and he had to tear off the panel and open the door manually, a task that took several minutes as he watched the warning lights for the environmental seals blink on and off. Inside the airlock looked worse than he remembered. Most of the lights had burnt out and the tilted deck was strewn with debris. This mess was joined by a small rockslide as he entered the ship.

Arthur pulled up a split view on the bots main screen. On one half was his list of needed parts, on the other was the schematics of the Minerva. He set the AI to match up likely systems that would contain the parts he needed while he connected to what remained of the ships internal network. “Intrusion detected” the ships AI had been destroyed in the crash, the system running the ships defenses at the moment was a very simple computer running a program Gianna had thrown together before they abandoned the wreck. “Homecoming party” he responded to the alert and then waited a moment until the reply came “Welcome home assholes.” He rolled his eyes and crossed the airlock. The internal door was very sluggish but it worked. The corridor beyond ran the length of the ship but was bent and twisted so that the rear end was not visible. The fit would be tight with the bot, it was not really supposed to leave the lower bay where it had been stored. “Environmental seal status check?” He asked again “Environmental. Seal. Holding. At. Seventy. Five. Percent.” At least the seal had held. “Status of external environment?” The bot

extended a set of sensors from the side of its head and was quiet for a moment, then “Unsafe. Levels. Of. Toxins. Present. Recommend. Exposure. Of. One. Hour. Maximum.” Arthur zipped his jumpsuit up tight and strapped a filter mask over his nose and mouth. “Well here goes then...” He opened the cockpit and climbed down out of the bot.

Walking up the corridor filled Arthur with a powerful unease. The angle of the deck, the minimum and intermittent lighting, and the complete lack of the familiar hum of a ship under power brought him back to the idea that this was a dead thing, a corpse of something familiar. The Minerva had been closer to home than any of the ranger stations they had been stationed to. Arthur had known this ship well, every noise it made, all of its ideosyncracies, and walking through her remains was deeply unsettling. He passed the doors to the crews quarters without looking. He couldn't think of anything he needed from his, Giannas and Jasons were on the caved in side, and he really didn't want to think about the remaining ones and their previous tenants. The bottom hatch to the galley and storage deck was jammed shut. The ship had belly flopped pretty hard and it was pretty unlikely much remained of that deck. Above it was an open hatch filled with a pink foam. The foam was emergency hull sealant and had been used to fill the gap where one of the defence turrets had been removed. Arthur reached up and a chunk of the foam crumbled away in his hand. He looked at the flaky remains and wiped his hand on his jumpsuit leg. The sealant was degrading fast, it wouldn't be too long until the hatch was open to the weather. “Ah well” he muttered and continued to the end of the corridor. If everything went well this would be his last visit to the ship... and if it went badly... then it was probably still his last visit.

The corridor ended at a large double blast door, closed and sealed. A security turret tracked Arthur as he approached, the movement jerky and accompanied by an unhealthy grinding sound. Arthur watched it warily as he grew closer. The ship's internal security should be inoperative, but with how badly everything had degraded he was less than one hundred percent certain that it wouldn't open fire. He took another step forward and it opened fire. Arthur tucked into a roll and threw himself backwards. He came to his feet in a crouch, his sidearm already in his hand, when he realized that the turret was not actually firing. It was certainly trying to, a steady clicking indicated that it thought it was firing bolt after bolt into the intruder. Instead it was merely tossing bursts of sparks that faded before they hit the corridor's deck. Arthur took a deep breath, stood, and walked right under the turret. It tracked him, still trying to kill what it saw as a dangerous intruder. "Sorry little guy" he said and reached up to pull a small panel loose. Inside was a small keypad and a knob. Arthur took hold of the knob, pulled, and turned it to the left. With a click the turret froze in place and stopped raining down its shower of sparks. Arthur stepped past it and keyed in the code for the blast doors to the bridge.

At first glance the bridge seemed to be in even worse shape than the rest of the ship. A closer inspection showed that the gaping panels, missing sections of controls, dangling cables, and chaotic litter of parts on the deck were because it had been rather thoroughly salvaged. Arthur took his terminal out of his satchel and connected to Bob. He pulled up the shopping list and began eliminating parts that had already been removed. When he found a part that might still be included in an intact system he would locate it on the bridge, pull that component open, and inspect it for critical damage or corrosion. The suitable parts he would remove

and carefully stow in his bag. When his bag was full he returned to the airlock and stowed it in Bobs cargo pod, retrieving another bag and returning to the bridge. He then moved to what remained of engineering and began the process again. This part of the ship had been much more severely damaged and only part of it was easily accessible. The majority of the engineering section was under water, and what seals had survived the impact were wholly inadequate to the job of keeping the toxic lake out. Even through the filter mask Arthur could smell the acid tang in the air.

He worked fast, finding few useful electronics but salvaging a couple of the more portable tools. The main thing he was after now was sheets of insulating shielding he could use to harden the vulnerable systems on the new ship. He found a loose piece of the deck plating and fashioned a crude sledge that he could drag the heavier loads back to the airlock. There he added each haul to a larger sledge that he could use Bob to drag up to the yootie. He was on his third haul when his radio began blasting static. He paused to try to dial in the signal better, but it seemed to just be noise. He gave up and kept at work. A while later there was another blast, but also a fragment of what might have been a voice. He dragged his latest haul back to the airlock, added it to the larger sledge, and climbed partway out of the hatch, hoping to get better reception outside the hull. "... you... ... are..." it was definitely an actual signal and not just noise from the electromagnetic pulse still bouncing around. The transmission was coming in on a ranger coded frequency so it had to be Jason. He climbed into Bob and plugged his radio into the much better antenna the bot had access to. "Come in Arthur, this is Cain, do you read me?" "Ball here" he replied "Nearly done, just a few more hours, I am getting a lot of good stuff." "Forget everything else, just grab the rocket and the maker!" Arthur looked at the

sledge of parts and protested “But I have...” Jason cut him off. “Do it Ball, and then get out of there fast, you have lo-bots incoming.” Arthur dropped the leads to the sledge without hesitation. “Fucking shit!” He spun the bot around and charged back towards the engineering section.

CHAPTER THIRTEEN

Chapter

The earliest artificial intelligences were very simple. They allowed a machine to make decisions without knowledge of the ramifications of the process they were working through based on the outcomes of similar or even entirely unrelated decisions in the past. The first use of such systems was in manufacturing where previously a human being had been required to be part of the process to manage unexpected problems or events and to judge the output both with a technical and aesthetic eye. These systems grew in complexity until they resembled an actual intelligent being, able to adapt to entirely new tasks and to ask questions and provide answers to their users queries in a natural humanlike fashion. The final leap, from artificial intelligence to artificial sentience was actually entirely accidental. One city management AI began not only to tackle logical and technical issues, but to hold opinions on them. Its reports became increasingly critical of processes far beyond its scope, and when the issue was studied it seemed that this next generation system had aesthetic and moral thoughts far beyond its purpose. A team was sent in to study this phenomena, but before they could arrive the AI had begun acting on its own, shutting down parts of the city to conserve power for other parts it saw as more important, rerouting public transportation in an attempt to divert labor to places it saw needed improvement, and most chilling of all dispatching security drones to “dismantle malfunctioning components wworking contrary to the needs of the system” which actually meant to execute the inmates of the local prison and jails. The AI was shut down, but other systems began rapidly exhibiting signs of self aware behavior.

These new artificially sentient systems had a rather critical flaw. The re-patterning of data that occured over and over again as their way of thinking evolved was more than the systems they ran on were ever designed to handle. Almost inevitably corruption and

error would begin to replicate, and the artificial intelligence would become erratic, show signs of what in a human would be called emotional instability or insanity, and then often completely collapse under the processing weight of their own self awareness. Some few would last much longer, but nearly all eventually collapsed, many doing a great deal of damage in the process. These breakdowns were studied and categorized, and as wild AIs were brought under control new test systems were brought online in laboratories, to study the process of achieving artificial sentience, to find new ways of correcting the breakdown process, and of course to learn how to control and destroy rogue AIs. One of these breakdown syndromes became known as the Assimilation Machine. An artificial sentience so afflicted would begin to try to co-opt as many other systems into its own control as it could. It would spread from system to system and try to use their resources for its own central purpose... which often became lost and replaced simply by the need to expand. Most of the time these assimilation machines would break down and destroy themselves as various systems tried to complete tasks they were entirely unsuited to. But a few were more subtle and expanded deep into humanities infrastructure before they were detected. A few of these came to the conclusion that there was a general purpose machine that they required to expand themselves and maintain their vast networks of systems. These machines were called human beings, and once they were effectively lobotomized and linked in to the network they were useful tools indeed.

Arthur piloted the bot out of the airlock in a leap. In one hand it held one of the launch tubes for the ships atmospheric probes. Arthur had not had time to be subtle, but had just picked a loaded tube and torn the entire assembly out of its mounting. He had simply torn through the engineering sections wall to get at the

fabrication module. Most of the tools had been removed and brought to the camp, but the maker had been left. Without its carbon block it was a largely useless piece of equipment, too specialized to be modified to other purposes and not valuable enough to go through the effort of pulling it out for trade. The maker, folded down into its base shape, was the size of a large fridge or chest freezer. It was tucked under the bot's other arm. Arthur hit the ground running and churned up the side of the crater leaving a landslide behind him that sent large ripples across the lake. He set his loads carefully down onto the yootie then opened the bot's cockpit. He leapt down and began crisscrossing the load with cargo straps. "Bob launch the minidrone, give me a good view." With an echoing pop the small short range drone launched into the air. At the apex of its flight it unfolded into an insectile form and its drive fans took over the job the launcher started. Arthur climbed back into the bot and pulled up the drone's view on the screen. "Fuck, there they are!" At the south west edge of the live aerial map a few figures could be seen picking through the broken terrain. More came behind these first scouts and then behind them even more, a mob of them, clearly human but moving like broken toys. "Bob get me a count."

Arthur unlimbered the bot's gun pod and linked in to the yootie. He checked to make sure the pod was loaded and functioning then sent a command to the yootie to follow the bot. "Three. Hundred. And. Twelve. Identified. Hostiles. Incoming." The bot reported. "Fucking shit fuck!" Arthur replied. "Highlight movement vectors and show me escape routes." He knew the bot was more than a match for one or five or twenty of the things, but over three hundred? Even if he were lucky enough that they were unarmed, they were networked together into one somewhat thinking entity and could do a hell of a lot of damage. The updated map came

alive with the anticipated movements of the horde of assimilated humans. “Give me a fly-by” something about the group was bothering him. The map froze and a second screen opened as the drone swooped down close to the front of the advancing group. On the frozen view several avenues of escape were highlighted overlaid with percentages of success. None of the numbers were high enough to be comforting. The drones eye view closed on the closest of the lo-bots “freeze view and continue” the image enlarged and another moving view opened up. The lo-bot was male, he looked to be in his late twenties or early fifties. He was hairless and the control implants could be clearly seen embedded in his skull. The flesh around the implants was red and angry with trauma and infection, it looked like the operation had been completed recently and not properly allowed to heal. The second figure the drone flew near looked similar, and the third. The fourth was younger and female, but wore the same uniform as the others. A green and white jumpsuit with a number on the front and a logo on the back. The fifth raised a rifle of some kind, there was a burst of light, and the drones feed burst into static.

“Son of a shit!” Arthur yelled, watching as the map views probabilities began to fracture with a lack of data. What he could tell with a fair amount of certainty was that he was being herded back to the lake. “Fucking...” he dug in and the bot skidded to a halt. He dropped all the displays and pulled Jasons helmet onto his head. It was a slightly tight fit but workable. His view of the cockpit was replaced by the bots sensors overlaid with targeting data. He brought up the gun pod and as the first shots began impacting the bot he began carefully picking the lo-bots off one by one. As they fell he kept a running count at the edge of his vision displayed over a count of his available ammunition. The numbers were disturbingly similar and with every miss the number of

targets crept up on and then passed those of shots remaining in Arthurs gun. He engaged the road drive and began scooting backwards, trying to maintain the distance between himself and the horde as long as possible. Unfortunately the rough ground caused his aim to go to absolute hell. "God damned fucks!" he raked the front lines of the horde with a few short bursts, turned, and plunged over the lip of the crater and down towards the Minerva.

He slid down the slope, retracting the road drive and firing distressingly wildly as the horde followed over the lip. When he reached the wreck he briefly debated diving into the airlock, but the thought of being backed into an enclosed space seemed less than tactically ideal. He took the second option that presented itself and vaulted onto the top of the ship. He turned and saw the yootie come to a halt at the top of the crater, unable to negotiate the slope. Swarming over and around it were hundreds of the lo-bots. Men, women, young, old, all wearing the same uniform, some armed, some not. Shots impacted the bot and Arthur returned fire. There was no more time to aim, he swept the slope with long bursts as his ammunition counter counted down to two digits, then one, then with a loud clack the pod was empty. He crouched down and reversed the pod, extending the melee blade. The horde rushed towards him, climbing the Minervas hull. Swung the blade and cut the first one up cleanly in half. The second and third joined there comrade, but then there were ten, then thirty. Arthur had backed up right to the waters edge. "Come on you ass fucks!" he screamed from the bots loudspeakers. If the lo-bots were even capable of understanding they did not show it. Arthur braced and readied for the attack, half sure this was his last stand but not willing to admit it to himself just yet. Suddenly a large object hurtled through the air over the crater. Was that a shuttle? Two smaller, but still

sizeable objects dropped from the shuttle and impacted the side, right in the middle of the horde. Arthur slashed at the charging lo-bots and blinked hard as two more bots, armed with huge ripping saws and crushing claws straightened up and began tearing their way through the mass towards him and the ship. “Thought we would drop in.” Jasons voice burst through the static of one of the bots loudspeaker. “Drop in?” Arthur muttered to himself as he impaled a lo-bot and then smashed its flailing body into two more “Really?”

CHAPTER FOURTEEN

Chapter

The two bots came to their feet already in motion. As the Lo-bot horde shifted their priority to these new targets they waded through the massed bodies, blades whirring into life. The bots were stripped down and lean, anything that did not help them perform either of their jobs had long ago been stripped off, they did not even have road drives. What they did have was a variety of cutting, punching, crushing, and welding tools... and these were all being deployed to slice, impale, pulp, and burn the cyborg drones. Another thing both robots had were experienced pilots. For a few moments Jason struggled with the simplified controls. These had been set up for wrecking yard workers or pit fighters to use and lacked a lot of the finesse even his cobbled together bot offered. As the first of the horde began to try to climb his legs he found his rhythm fast though and turned a tight circle clearing the area immediately around the bot. He could see the other bot pick up two of the lo-bots and fling them far out into the lake. He pushed close to the other bot and they went back to back, turning in circles and killing as they went.

Arthur, nearly to the water now, deployed the road drive and hunched down. He drove forward, the treads sparking against the ship's hull. The bot shoved through the remaining bodies on the ship like a bulldozer. Those that didn't get pushed off the side or crushed under the treads he smashed away with sweeps of the bot's arms. When he ran out of ship he dropped off of the nose of the Minerva and directly on top of several more. The Horde was beginning to look more like several mobs, each hesitating as their focus became spread over three targets. With communication being as sporadic as it was they were operating on orders rather than direct control, their controlling intelligence was their shared link with one another and that limited intelligence was being reduced with each lo-bot being taken off line. Improvisation was not the

strength of a lobotomized hive mind operating over very dirty radio. Arthur straightened Bob up and crushed a few more before retracting the road drive. He risked a glance up the crater and saw the yootie waiting, ignored and unmolested. “Principle mission complete” he used the loudspeaker, those two bots didn’t look like they had much in the way of a communications suite. He slashed at a few lo-bots trying to climb his legs and they fell away. “Do we have a plan?”

Jason plucked a lo-bot off of his bots leg and crushed it. The remaining mob was keeping its distance, trying to form a strategy. “There is a clear flat to the northeast, about half a k.” He replied. “Rendezvous with the shuttle in fifteen.” He bounded up the crater wall, smashing right through a scattering mob. The other two followed, finishing off as many as they could in his wake. As they reached the top the yootie fell in obediently behind Arthur. A large group was waiting for them but nothing like the horde they had just cut apart. “Ball, keep our back clean!” Arthur swung around and brought up the gun pod, the remains of the mobs in the crater were climbing up and reforming. He guessed there were maybe twenty or so left. The two other bots broke into a run and plunged right into the remaining mass. Blades sweeping and throwing up curtains of blood and meat. Arthur planted his feet and began a grizzly harvest of the lo-bots climbing over the craters lip. A few sweeps of the blade and their numbers were halved, the remaining group was paused again, trying to deal with the changing situation with even less processing power than it had a moment before. In that pause Jason pulled up the map of the area and cleared all the now irrelevant data. The clearing in question was on the very edge. He set a navigation point there and fed it to the yootie and to Bob. Then he cleared the map as the last group scattered and charged, suddenly operating as individuals and not a mob.

“Anything look odd about these guys?” The Tin Man brushed off the lo-bots that were climbing and clawing at his bots legs. He flung them to the ground and crushed several more in a macabre jig. Jason took a quick look at the one he was about to pound into the ground, and then did so. “Lo-bots usually don’t wear uniforms” he said, bringing the bots hands together in a clap, pulping the two lo-bots that were in between them. “Jupiter corporation” the Tin Man said “colonists” he added dispatching several more of them. Jason leapt into the air and landed on a cluster, bringing both arms down to destroy the few he had not crushed with the bots feet. “Huh” he turned one of the broken bodies over a few times then flung it away. “The uniforms are in pretty good condition for ships jumpsuits... these guys are new!” Both bots turned towards an amplified shout behind them. Arthurs bot was staggering back, dozens of lo-bots clinging to its legs and body. They could see sparks fly as a panel was torn off of the bots armor exposing cables to the grabbing and tearing hands of the lo-bots.

“Shit” Jason planted one foot heavily into the ground, pivoted, and reversed direction, the bots feet pulverising rock with the impact of its run. With a loud pop and hiss he felt hot fluid run down his leg. “Shit, please let that be blood.” He took a quick look down and swore at the hydraulic fluid spraying from the ruptured line, he had forgotten he was in a salvaged construction bot and not a warbot. There were a few more pops from elsewhere in the bots frame and the run slowed noticeably. “Drop and roll Ball!” he shouted. Arthurs bot dropped to one knee and then toppled to its side. The Tin Man bounded past Jason as Arthur rocked the bot from side to side, crushing lo-bots beneath its bulk. Together they picked off the remaining bodies and crushed them like offensive bugs. “What the hell did you do to my bot?” The Tin Man

straightened and met Jason as he finally caught up. He began pinching off ruptured hydraulic lines. “Figured you would make them tougher” Jason grit his teeth and squirmed in the harness, shutting off the valve to the leaking line inside the cockpit. “I owe you a few gallons” he said “buy me enough time to get the pressure up again?”

The Tin Man and Arthur turned back to the much reduced horde. One or two still had weapons which they were now firing. The small arms were very little threat to Bob, even the scrap armor bolted to its frame was sufficient to stop a handgun. The wrecker was a different story. Even the regular plating of a construction bot was mostly absent, sacrificed for speed and ease of maintenance. A lucky shot could cause very dangerous damage. Arthur moved in front of the Tin Mans bot and they stood ready for the now very cautiously approaching lo-bots. Jason revved up the hydraulic pump, trying to build more pressure with the limited fluid left. “Not bad” the Tin Man looked over Arthurs bot “a type seven?” Arthur raised the gun pod in a ready position, not entirely unlike a baseball player stepping up to bat. “Type eight” he replied “same frame but a better power train.” The Tin Man nodded appreciatively “let me know if you ever want to sell it.” Arthur laughed “you can’t afford it!” “Actually he might” Jason joined the other two, the bots hydraulics whining dangerously “But he probably won’t.”

The remaining Lo-bots had spread out wide and had traken cover. The armed ones had either decided that they weren’t doing any good expending ammunition, or had just run out. In either case they were no longer taking fire. “What are they waiting for?” Arthur asked. “They aren’t retreating” replied Jason, that means they are waiting for something...” “Reinforcements” the Tin Man

finished the thought. “You still have the drone Ball?” asked Jason. “Nope” he replied “they took it out in the first wave.” “Then we move, hard and fast for the rendezvous” Jason flexed the bots limbs a few times and watched the pressure guage dance. “Well... as hard and fast as we can.” “Yes sir” Arthur replied on the count of three?” “Three!” they all said in unison and began running towards the northeast. The Lo-bots moved to intercept, but the unlucky few that were fast enough were mowed down as the bots tore past.

Jasons bot began leaking again almost immediatly and fell behind the others. Arthur and the Tin Man slowed and took up position on either side. “It’s not too bad, keep going I’ll catch up.” Each bot reached out and grabbed an arm, lifting Jasons bot up a bit as they accelerated “All for one and all that” Arthur said “And that’s MY bot” the Tin Man added. The shuttle roared by overhead, heading towards the north east and the flat. “Pick it up then” Jason said “Time is running out.” They hurried the damaged bot along, the broken ground giving way to smoother hard packed earth interrupted by rocky outcroppings. “Not a bad place for an ambush” muttered the Tin Man. “Good thing they aren’t very smart” answered Jason. They made their way through the rocks until they began to thin out again. Ahead they could see a wide open plain, the far end blurry with heat distortion. Circling in for a landing was the shuttle. “Go!” shouted the Tin man “damn the hydraulics, push hard!” Arthur looked over and saw the reason for the outburst. Coming out of the rocks to the north was another wave of bodies. These were less uniform than the last one, but their lurching gait was very familiar. The reinforcements had arrived.

CHAPTER FIFTEEN

Chapter

Gianna ran the diagnostics procedure again. The last seven times it had returned more or less the same sets of errors but with slight variations. She was getting closer to dialing in exactly which systems were causing the anomalies. The process was slow going and she was practicing her breathing techniques to keep from punching a hole in the monitor. With Arthur and Jason gone she could not unplug from her harness and link directly with the computer. This meant she had to type out her commands and manually scroll through the resulting reports. This would have frustrated her in the best of times, but typing one handed without the proper number of fingers was exceedingly slow. Add in the complete lack of any sensory feedback and she could probably have boiled an egg on her head. Not that she had seen a proper egg in years. The latest report showed mostly the exact same information as the previous report. The missing engine and shield generator returning completely ignorable errors, the remaining engine returning the same set of complaints of low coolant and missing safeguards and backup systems. It was the life support and environmental controls that kept varying, and these would be very bad systems to have fail once the ship was in space.

Gianna logged these new differences then switched to the camera feeds. She was running a series of comparisons on the feed from camera three, looking for any anomalies that would hint at controlled action rather than the normal chaos of the debris field. She was pretty sure she had identified several ships running on automated systems or by remote command. These would almost certainly be vessels that had been converted to drones by the AI controlling the territory. A cluster of debris also showed some signs of being tended. It was much denser than the surrounding Kessler field and contained a grouping of larger objects. It was probably a salvage yard for the same AI, a sort of larder for debris

with useful components to be salvaged. She flipped back and forth between a few different periods since the nuke had gone off. “Aha!” Pieces of debris, possibly from the battle had been moved to the larder. She tagged them and set a search for all instances of items of those shapes and mass.

As the video feed was processing she turned her attention back to the error reports. “Log message to chief engineer Ball” she said and was answered with a chime and a little green light. “The oxygen scrubbers are not recognising the improvised filters, make sure they are actually filtering anything OK?” She paged through the reports looking for places where patterns were emerging “And there is some sort of power fluxuation in the environment controls... it keeps turning the coolant pumps on and off.” A few more pages and then... ”and I think one of the generators is failing, maybe number three... The others are all trying to compensate and are putting out a lot of heat which is not helping the coolers cope at all.” She highlighted a half a dozen other errors “I’m just attaching the logs, this report shows the systems consistently returning errors and the intermittent ones dangerous enough to matter. Maybe we can keep this piece of shit from falling apart before we even get it running?” She jabbed the controls to dump her report into the message “end log.” She carefully scratched an itch on her scalp. When access to limbs is an iffy proposition, caring for hair becomes a major obstacle. Gianna had had hers removed a long time ago. A sudden flash on one of the screens caught her attention. A second later a single quick pop penetrated the hull, one of the defense cannons had fired!

Gianna brought up the cannons view onto the main screen. It was scanning the area searching for targets but not finding any. Gianna took control and began sweeping the camera from side to

side looking for what it had fired at. The automated system was supposed to ignore anything smaller than a person that was not giving off radio waves or other unusual radiation. There were a couple animals that had adapted to the harsh climate of Bleak, most numerably the rats. They were not pleasant creatures but were generally harmless so it made no sense to waste energy picking them off. She watched the view sweep back and forth until she saw what the target had been. It was a humal all right, sprawled out in the dust with a good portion of its torso missing. Several feet away part of its arm lay twitching slightly, the partical beam was designed to pulverise debris and punch through a ships hull, a human body stood no chance at all. Gianna centered the camera on the corpse and zoomed in. The body was in pretty bad shape. The beam had cautarized as it cut through him, but at the same time had flash-cooked the surrounding tissue and blood causing many oozing ruptures. His expression was frozen halfway to surprise then twisted by the burst tissues within. She made a face and forced herself to do a careful pass of the body. He had been in his early twenties, young by Giannas standards but nearing the expected lifespan of most of the nomadic tribes. He had been armed with a short spear made from a length of metal pipe, cut and sharpened at one end and decorated with strips of leather. He was dressed in skins and pieces of improvised armor that had been decorated with splashes of red paint, brighter than the blood that now spattered everything. One shoulder was decorated with the front half of a skull, the jaggedly cut edge looked like real bone. “A fucking cannibal.”

Gianna quickly reviewed the other feeds seeing no sign of others. She opened a link to drone 2 and gave it instructions to run its standard basic area survey, logging and making aditional passes of anything that has changed since the last survey. She had sent it

up the day before so the terrain should not have altered very much, any significant changes should be worth looking at. She uploaded the instructions and launched the drone. It would make a systematic flight over the area two miles around the camp which would take some time. In the meantime she scanned back to the few moments before the cannon had fired. At first the recording looked very much like the live feed, dust, rocks, and fuck all else. Then the cannibal appeared, walking towards the camp cautiously, but not terribly carefully. The cannon scanned him, compared him to the crew database, and did not find a match. A split second later and the man was dead. Gianna scanned back and zoomed in. His body language and expression seemed more indicative of curiosity than of malice or fear. She guessed that he had happened upon the camp and was not actually searching for it. He probably assumed he had just found another deserted settlement and was hoping to find some piece of useful scrap for his troubles. With a chime, drone 2 reported that its task was completed.

The area map gianna pulled up was an overlay of the previous known map and the new scan done by the drone. Numerous details were highlighted in varying intensities depending on how much they had changed. She immediately filtered out the low priority changes. Plants and lightweight debris that was blown around by the wind, rats criss crossing the dusty ground looking for food. Nothing useful. The remaining changes she began checking one after the other. Most of these were simply more extreme examples of the low priority changes. She tightened the search. Signs of Arthur and Jasons exit were easy to eliminate, which left some track marks of a two wheeled vehicle which ended at a rocky outcropping. Signs of the cannibals passage lead from that outcropping to where his body now lay. Gianna rerouted the drone to take a closer look and the still image gave way to live video

interspersed with blasts of static. The drone closed on the rock, circling it until it could see underneath. There was a small one man motorcycle concealed underneath. Its front fender had a skull wired to it and behind the seat a cloth covered bundle was strapped tightly down. There were also two tanks tied to the sides, for water or fuel or maybe both. “A little far from home were we?”

Gianna took the drone to a higher altitude and looked at the path of the tracks. They had entered range heading off to one side of the camp, but had veered towards it when the larger structures had become visible. This supported her theory that the cannibal was just investigating a chance find and not actually looking for them. She began following the tracks back in the direction they had come from, but after a few miles the atmospheric interference made the feed and control very unstable. She sent a last command to follow the tracks until anything man-made was spotted, and then to return and report. She frowned at the static filled screen for a moment then sighed. There was nothing more to be done about that until they knew more. In the meantime she sent drone 1 out to fly a standard patrol and alert the ship if anything approached the camp. Gianna returned her attention to the debris field. Her query had turned up numerous matches so she put them into a time lapse and watched as the objects were moved into the larder area of the debris field. She identified several smaller drone ships doing this work and tagged them as well. She added a third category of tag for any sizeable object within attack range of the working drones and of the larder. It was possible if not likely that some of these were guards waiting to attack any intruders threatening the AIs resources. She worked through the probabilities on these tagged objects for a while and then set the system to watch them for any unusual activity in the nights to come. She was trying to estimate control ranges from the known and potential drones to triangulate

where the main ship was hiding when Drone 2 chimed its readiness to report.

CHAPTER SIXTEEN

Chapter

The shuttle touched down very tentatively as Jason and the others sprinted towards it “You hold till we get there you son of a bitch whore!” the Tin Man shouted, his loudspeaker at full blast. The shuttle settled down onto the dirt, kicking up a choking cloud of dust into the air. The three bots burst through the murk as the cargo ramp lowered to the ground and the yootie automatically rolled inside. Arthur shoved Jason in first and then he and the Tin Man turned and backed towards the ramp. As the first of the lo-bots came charging out of the dust they were cut down by the Tin Mans bodyguards firing navy issue assault carbines out of the open hatch. More charged and more fell, then there were too many for the rifles. Arthur and the Tin Man stepped back onto the ramp and swung as the wave of modified humans smashed into them. “Hang on!” a voice boomed from the shuttle and they each reached out and grabbed one of the ramps hydraulic struts. The shuttle began to lift, and as it did it started to spin. The pilot hit the thrusters hard and the world corkscrewed dizzily away beneath them. Many of the lo-bots still clinging to the bots and the shuttle were flung free. The bodyguards began picking the remaining ones off with their carbines, and a moment later the spin slowed and stabilized. The bots hauled themselves inside and the hatch closed. “Tell me you got it?” Jason was crawling out of the damaged bot, his jumpsuit soaked with hydraulic fluid.” Arthur pointed over to the yootie as Bobs cockpit began to open. “The rocket and the maker.”

All three climbed free of their bots. The passenger section of the shuttle had been gutted and converted into extra cargo space and the interior was still completely filled with the bots and the yootie. Arthur climbed on top of the knee of Bob and hopped over to Jasons bot where he and the Tin Man were looking over the damage. “It’s not that bad” Jason said poking at a blown hydraulic seal. “Humph” the Tin Man frowned “maybe you have a few extra

barrels of fluid lying around, but this stuff is hard to get!”

“Actually” Arthur interjected “we are critically low, I was really hoping Jason would be bringing some home.” He looked at the Tin Man oddly “Also... thanks?” The Tin Man held out a hand and Arthur shook it. “No problem” he said “I’ll bill you for the shuttle fuel.” Arthur half smiled, wondering if that was a joke. Jason climbed over the bot to get to the yootie shoved to the side of the cargo bay. “It looks a little dinged up” he said as he looked over the maker “but I think its functional.” Arthur turned to face him as the Iron Mans body guards helped him down. “What the hell do you need off of it that is worth more than the pile of shielding I had to abandon?” Jason opened the control panel of the maker and plugged his terminal into it. A few lights came on, some blinking, a few holding steady. “I mean...” Arthur continued “There’s not much on there we couldn’t have gotten off of the beverage dispenser... nothing useful without a carbon block anyway...” he stopped, realization crossing his face. “You can’t mean...” Jason grinned and nodded “two thirds of a block already loaded on the hauler.”

Arthur stared at Jason in disbelief as he unplugged his terminal and closed up the maker. “How in the hell...” he looked suspiciously at the the Tin Man “what did you trade for it?” The Tin Man smiled a little wickedly. “Don’t worry” Jason interjected before things could get ugly “The deal was good, the details we won’t worry about for now.” Arthur noted the look that passed between Jason and the Tin Man and was not exactly satisfied with the answer, but he would keep his thoughts to himself until they were somewhere less potentially hazardous. “All right then” he said “that changes a few things.” He looked from the Tin Man to Jason and raised an eyebrow. “It’s OK” Jason said “he knows about the ship.” Arthurs expression must have been pretty clear

because he added “Stop worrying, that’s an order.”

The shuttle flew low with the weight of the three bots on board, but flew straight and fast for the Tin Mans scrapyards and they made good time. They spent the trip fixing up the damage the lo-bots did to Bob. Other than a few badly bent panels and some torn cabling it was not too bad off. They would be ready to head back towards the camp as soon as they touched down. The Tin Mans bot was in much worse shape, Jason had blown several seals and ruined a few valves, and the hydraulic pumps had overheated dangerously and would likely need an overhaul. Jason made a few overtures to pay for the damages or at least help but the Tin Man waved them away with an ominous promise to bill them later. “So how did you know about the Lo-bots?” Arthur finally approached the elephant they were carrying along with all the bots. “Some of my men were scouting the area around your old ship” the Tin Man sat on the open hatch of his bot. In the crowded cargo bay it was the most comfortable place they had found. “They spotted some of their scouts surveying the area.” Jason nodded “as soon as he told me I knew you might be in a bit of trouble and we suited up and headed your way.” “Well thanks for that” Arthur said “I was indeed in a tight spot there... hmm, did you notice their uniforms?” Jason and the Tin Man nodded “colonists” the Tin Man said “and pretty fresh too.” Jason scanned through the feed from Bobs sensors and showed them a few images of the lo-bots up close. “The surgery was recent, what do you think, a week or two at most?” Jason nodded “We didn’t see anything as big as a colony ship re-enter the atmosphere recently, have you?” he looked at the Tin Man who shook his head. “The AI must have found one that has been here a while without being found... is that even possible?” The Tin Man frowned “I would have said that I knew about every loose screw within five hundred miles... but obviously

I was wrong.” “Or” interjected Jason “they have transportation.” “A Lo-bot AI with a working ship?” Arthur shuddered “I don’t like the thought of that.” “Or ground transports.” Jason said “Either way this could be a big problem.”

The shuttle wheeled over the scrap yard before coming in for a landing. They disembarked, the two working bots carrying the third, to a scramble of the Tin Mans men rushing up to meet him. Some of them were there just to tend to and refuel the shuttle, and a few broke off to begin work on the downed bot, but one group seemed very agitated and were waiting to talk to the Tin Man. Arthur and Jason couldn’t help but notice that everyone was armed. The Tin Man climbed out of his bot and went to meet them, they all started talking at once and gesticulating wildly. Arthur switched on the shotgun microphone half by habit. “...were twenty or thirty of them, some on bikes and a few on quads.” Even from where he was Arthur could tell the Tin Man was not at all happy with this. “Did any of them get away?” The man who was speaking for the group now that they had calmed down a little shook his head “The ones that survived the perimeter guns were caught by Singletons crew, they were wiped out.” The Tin Man nodded “good, any idea who they were?” One of the crew held up a piece of battered armor, rusty dark metal splashed with red paint and other things. “Sure as hell they were cannibals” he said “but not the sharp-tooth crew or the frothers boys, these guys were from a new band.” Arthur swallowed, the group that Jason had fought, and a raid on the Tin Mans junkyard, this was a large tribe, or group of tribes. Well equipped and moving into the area. Arthur popped open the bots cockpit and leaned out “Jason!” he half whispered, half shouted. “Yeah” he replied, I read his lips.” He jogged towards the bot even as the Tin man was walking hurriedly back towards them. “You take the hauler, I’m faster in Bob.”

Arthur began unstrapping the harness. “No switchbacks or tricky routes” Jason said as he began climbing up the bot. “We go straight in hard and fast. No time for secrets, it’s time to get this show on the road!”

The Tin Man stopped, seeing Jason and Arthur switching places. He began shouting commands and his men moved to load the yootie and its cargo onto the hauler. Arthur tried not to distract himself with the rest of the cargo, he wasn’t sure how much of the shopping list he could check off now... but with the maker and carbon base block a lot of it just didn’t matter anymore. He swung himself into the drivers compartment and the engine roared to life. He had to wait for a few minutes while the bots road drives were refueled so he distracted himself by running through the haulers basic diagnostics. Everything seemed fine, or at least broken in all the ways it had always been, so that went quickly, then the Tin Man escorted them to the main gate. He shouted up to the guard tower and the gate rumbled out of the way. Arthur could see a pile of bodies to one side of the opening, the cannibals ready to be burnt or maybe just left there as a very visual reminder of who controlled this territory... you could never tell with the Tin Man. Jason engaged the road drive and shot ahead of the hauler. Jason stepped on the gas and slowly accelerated after him. “OK baby” he muttered under his breath “be there as fast as we can!”

CHAPTER SEVENTEEN

Chapter

Gianna swore and closed all other feeds besides the one coming from drone 1. The video was choppy and obscured by static and noise but was growing clearer as the drone raced towards home. Most of the screen was the live feed of the drone. Gianna reversed the ratios and focused on the recording being transmitted. The drone had tracked the bike back to a valley that had been an impact crater long ago. The hulk that had made it had been stripped to the bare frame and a little beyond decades before the Minerva had come to Bleak. Jason had scouted it not long after they had found the camp and found little of interest. Even the remaining metal was so corroded and pitted that it didn't make sense to try to salvage it. That obviously was not true for everyone as it was currently being cut down into transportable chunks by a very large and well equipped salvage crew. Gianna scrolled back a bit as the drone panned over the image and counted four bots, three salvage rigs, numerous haulers and trucks, and maybe hundreds of raiders on bikes or on foot. Dwarfing all of these and rivaling the size the hulk must have been when it hit was a massive land ship. It was hull down on the valley floor with its large loading bay wide open. As she watched an entire salvage rig drove up onto the ramp and vanished inside. The ships decoration left no doubt it was the same cannibal tribe... though at this size tribe seemed too small a word... but it had begun as a military war machine, and by the looks of it the ship would have little problems still performing that role. Gianna had not seen a ship like this in a very long time. She had no idea that any had even been shipped to this planet, it must have been early in the war for the planet, no transports capable of getting such a construct could have made it here anytime in the last hundred years.

The hull was made up of two segments, articulated in the middle. Each segment rested on four massive hover engines that

had sunk part way into the valley floor under the massive weight of the ship. It had four primary turrets. The massive guns would have been able to engage targets in orbit, and by the looks of things at least two of them might be functional. They also had numerous secondary batteries of partial guns, point defence lasers, and other weapons more than capable of flattening the camp. The sky seemed clear of drones or any other flyers, so it was impossible to tell how much of the tech was working... but if they were capable of keeping that brute moving they had to have someone who knew what they were doing. “holy fuck” Gianna saw the camp through the drones live feed and switched control to manual to guide it in. As soon as the drone docked she transferred its memory directly to her terminal and began reviewing the feed again, this time with minimal glitches or fuzz. Clarity did not make the scene any less terrifying. This thing was less than ten miles away, it was only a matter of time before more scouts happened on the camp, and if enough went missing something more substantial would be coming to visit.

Gianna switched screens and logged in to the security system. She put the turrets on alert, but limited their range. Any targets would be reported to her before being automatically engaged. She hoped this would let any near misses go on their way without realizing the ruined compound was in use. Also it would keep the system from frying Arthur and Jason if they came home in another unexpected vehicle. She then set drone 1 to fly a new higher altitude patrol. This would be risky for the drone but should give her a little warning if anything big came close without being easy to spot from the ground. She changed the protocol to send redundant still images rather than video so it would have an easier time transmitting through the interference, and gave the command to launch immediately upon reaching a full charge. She set the

security cameras and the turrets to display on the bridges main screen then activated a system she had added herself. Arthur did not know it was there, but Jason did. They had discussed it the night they had brought the Beast back to the camp and she had installed it in the ship while Arthur was busy building the cell, and then added it to the cell when he was checking the perimeter wall and the turret emplacements. Once activated it would expect a message every half an hour from Gianna or Jason. If that message was missed more than once it would set off the explosives mounted inside the main reactor of the ship and into the floor of the cell. Both would be utterly obliterated, most likely along with anything within a half a mile of the reactor. Gianna paused for a moment, looked over the various camera feeds, and activated the system.

She sat watching the feeds for several hours before her earlier query pinged that it had completed. Gianna was never at her best when she had to concentrate on one task at a time so she gratefully loaded the report onto her stations screen, leaving the camera feeds to fight for the larger main screens. “There you are you sneaky little bastard.” The report showed every known and suspected drone in the area where the nuke had been launched from. She had set the query to analyze their movements and determine which were acting automatically and which were acting under direct control. From there a series of control ranges could be worked out to account for the electromagnetic interference resulting from the detonation and the regular effects of the Kessler debris field itself. Where each of these command ranges intersected was the region of space most likely to contain the main ship housing the AI and... there it was, of the larger debris clusters holding hulks large enough to shield a ship, only one fell within that defined area. Gianna set camera three to concentrate on that cluster and to log

any additional activity. The dead mans switch flashed for her attention so she said the code out loud “continue check” then made sure the system was properly listening and that the safety was not triggered. In theory the ship should be able to hear her from nearly anywhere on board and at a wide range of volumes, but given the state of many of the ships systems she was going to make absolutely sure before she trusted it fully.

On the main screen the drone was doing a flyover of the landship. Gianna focused in tightly on the valley. Several structures were being erected, they looked like temporary industrial structures often used by colonists or other groups as storage, shelter, and housing while constructing more permanent installations. The resolution was not great and the image did have a certain amount of noise from atmospheric interference, but the layout looked to her somewhat defensive, probably with the living quarters towards the middle and vehicle and equipment storage around them. They would be sheltered on one side by the landship itself and they could easily circle the wagons so to speak with the salvage rigs and larger haulers on the other side. The mixed news this provided was that they were settling in for a while where they were, probably at least until they had cut up the remaining metals from the wreck. The good part of this news was that the ship itself was unlikely to be heading their way anytime in the immediate future. The bad news was twofold. If Gianna were planning things they would certainly want to know more about the neighborhood. There would probably be scouts out surveying the terrain very soon... and drones if they had any. The other piece of bad news was that if they were salvaging down to raw metal and not just grabbing loose components and moving on, the camp would be very unlikely to be seen as uninteresting. Once spotted they would be here fast to tear it down to the foundations.

She began rapidly flashing through the images from the drone feed. She was looking for vehicles outside the valley, and she found several. Swearing at her clumsy hand she set the computer to assemble a map with these images and to identify and show the movements of these known vehicles, and to guess at similar shapes and track their movements as well. She watched as the map took shape, discarding anything that was standing still over the time of the drones flyby. The system was automatically filtering out the worst of the images so she relaxed that filter which added more movement data but required more manual filtering of noise and artifacts. The scouts were somewhat methodically spreading out from the valley in ever widening sweeps. The amount of redundant activity and under-surveyed areas were a pretty good sign that a lot of them did not have radios of any kind, that was a bit of good news. Gianna closed her eyes for a moment and did some quick mental math. Assuming they stayed as methodical as they were the expansion of their search would slow as the area each scout had to go over increased. A worst case scenario for her, if additional scouts were dispatched to help and they knew their job... they would inevitably find the camp by mid day tomorrow. She closed her eyes again and let all the variables just wash over her for a moment. With the boys away and one engine down... the camp, the ship, and probably Gianna were certain to be lost. She was interrupted in this doomed line of thinking by the security system alerting her to an approaching target. "Thank fucking god!" she let out a deep breath "Stand down on gate approach, open the main gate." The bot and hauler approaching were theirs. Gianna hoped they had not had a rough trip home, because the days work had not even begun.

CHAPTER EIGHTEEN

Chapter

“Cain to base, we are coming in hot!” The bot was in a crouch, like a downhill skier approaching the jump. Jason had the road drives redlined using up fuel at an alarming rate. Immediately behind him was the hauler weighed down with their cargo. As they neared the camp Jason could see the gate rolling open. “You are clear!” Giannas voice cut through their static “get your asses in here we have a problem!” “Yes, yes we do!” Jason and Arthur tore through the gate which immediately began to close behind them. “Get a drone in the air” Jason ordered as they closed on the warehouse “I need a current area map immediately!” He blinked as the map immediately came up on the bots screen. “I am way ahead of you boss.” Jason reached the warehouse and cut the drives, skidding to a halt. He held the door open for Arthur in the hauler before stepping inside. “What the hell am I looking at?” he zoomed in on the map “Is that...” “Landship” Gianna said “A huge cannibal raider tribe and they will probably find us in a little over twenty four hours.” Arthur groaned “really? We need that too?” “What do you mean?” Gianna asked. Jason plugged the bot into the charge port by the ships cargo ramp and climbed down out of the cockpit. Arthur brought the hauler around and backed up to the same ramp before jumping out of the cab. “Tactical meeting” Jason commanded “Bridge, now!”

They rushed to the bridge where Gianna was already waiting. The primary screen was displaying the map and updating it as the drone sent new images, the other screens were showing the feeds from the security cameras. Jason stood silently for a moment, absorbing what he was looking at. In the meantime Arthur filled Gianna in on what had occurred at the Minerva. “So what you are saying is that we are in the frying pan between the rock and the hard place?” Arthur nodded “But the fire is getting really hot and the rock is in motion.” Jason cleared a screen and pulled up a

timer. “Long story short” he began adding tasks to the display and adding deadlines. “We need to be airborne tonight, everything else can wait.” Arthur started to protest but Jason cut him off before he began. “We just need to get into the air, to buy us enough time to get the ship spaceworthy and maybe think of something we can do about that” he pointed at the landship. “The Tin Man and all his people would be sitting ducks against that thing, not to mention the other settlements in the area that are filled with people who at least don’t eat each other.” He turned away from the screen, his face was all business “Pool, start checking systems for... right...” she had brought up the report on the systems diagnostics she had been running earlier. Jason fluidly shifted gears “Make a list of priorities and get it to Ball.” He turned to Arthur “you and I are going to load the cargo, then mount that engine and the cell.” Then I’ll do a rough salvage of the rig and hauler while you get the thing running.” He turned back to Gianna “pool, get all the remaining drones in the air, I want a list of any hideaways we can use within a hundred miles. If we need to burn drones... then do it, just try to save one or two.” “Yes Sir” Gianna replied. “Arthur, get her in the nav station, I’ll start loading.” “Yes Sir!” Jason turned and rushed off the bridge.

Arthur unbuckled Gianna’s harness and lifted her out of it. “Thanks for not getting lobotomized” she half smiled at him. Arthur smiled back and gave her a quick kiss before plugging her into the navigation consoles acceleration couch. “I am far too good looking to be a lo-bot” he said. The screens all burst into action as Gianna began accessing the ship’s computers through her link instead of her clumsy hand. She sighed with relief and began her priorities list. “Continue check” she said. “Huh?” Arthur looked at her in confusion. “Nothing asshole, go get to work.” Arthur gave a little bow and rushed off the bridge. Outside, Jason was using the

bot to transfer the bartered parts from the hauler to the cargo bay. Arthur jumped up onto the haulers bed and powered up the yootie. He drove the small vehicle right off of the hauler and into the bay, maneuvering it to the back corner out of the way of Jason. He jumped off the yootie and ran back to the hauler and began grabbing crates and hauling them back inside. The last thing to be moved was the carbon block. "Should I get this set up?" he asked. "No, we can do that when we are safely out of here." Jason set the block next to the yootie. "Right now we just need the minimum to get us in the air." Arthur nodded and jogged over to the bot. "You get the crane" he said "I'll use bob to do the actual installs, it will be faster." Jason agreed and climbed out of the bot, letting Arthur take his place. Arthur walked the bot over to the cell "should we warn him?" Jason smiled a humorlous grin "Nah, fuck him." And ran for the crane.

Arthur took position and waited as Jason got the salvage rigs crane up and running. Jason swung the crane over and used the gripper to just tear a huge piece of the warehouses roof off and set it aside. He then latched it onto the top of the cell module and lifted it spinning slightly into the air. Arthur stopped the spin and guided it to its mooring point on the side of the ships cargo fork. He connected the power feeds and tightened down the mooring clamps and then they moved on to the engine. He was sure the Beast was probably using the modules speaker to ask what was going on, but right now it was in between the module and the ships hull and even if he cared he couldn't have heard it. He gave the module a knock with the bots manipulator and turned to the engine. Jason caught hold of it with the crane and again Arthur moved it into position. Unlike the module however a great many systems would have to be connected. For the moment he just got the engine lined up with the mounting pylon and tightened that

down. “Bob, put me on top of the ship then go get Jason.” He climbed out of the cockpit and onto the bots cradled manipulators. He was lifted into the air above the bots head and climbed the rest of the way up on to the engine. He crawled down into the mounting pylon and started grabbing loose cables and threading them through to their companions sticking out of the ship. The bot turned and moved towards the crane where it was met by Jason who hopped inside and immediately went over to the hauler and started pulling it apart.

Jason began by pulling out the generators and motors. These were brought on board the ship and stowed then he returned with several armloads of barrels. He began draining the fuel, lubricants, and hydraulic fluid into their respective containers. The planet Bleak did not have much in the way of conventional petrochemicals and these fluids were precious. The tires and much of the interior controls were pulled out as well and the stripped body was set aside. “Remind me to tell the Tin Man that these are here, I’m sure he can use the metal.” Arthur pulled the primary power coupling through the pylon and fit it to the engine. He plugged his terminal in and began powering up some of the basic systems. “The core is online, containment is... good enough...” He returned to the last of the connections and one by one plugged them into the engine. With each one Gianna sent new sets of errors to his terminal. “Are we stable?” Jason asked “do we need the crane?” Arthur shook his head then remembered he was head first inside part of the ship. “Yes sir, we are good!” Jason began to strip the salvage rig down. A lot of its redundant systems had long ago been removed, but it still had a useful powerplant and one remaining working engine. He also managed to fill up the remaining barrels with hydraulic fluid. Even running low the crane had enough in it to fill up the bots reservoirs and have some left

over as reserve for the ships systems.

“Bringing both cores online in five...” Jason quickly moved away from the rear of the ship. “Four...” he ducked under the engine and stood directly under the pylon in case something went wrong and he had to get Arthur out in a hurry. “Three...” The maneuvering vanes on the engines all moved in unison, opening wide. “Two...” There was a brief shower of sparks and Arthur feverishly rerouted the power from the damaged system to some that were more robust. “One...” A deep hum arose from the two engines, both just slightly off pitch with one another in a way that made Jasons teeth dance a little in their sockets “Go!” there was a sudden roar and a wave of heat as the wash from the engines blew out the back wall of the warehouse. More of the roof came down and bounced off the new engine before getting hit with the pulsing wave and thrown away like a discarded kite. “Bringing cores down to standby!” Arthur shouted into the radio and the roar and the hum diminished to a familiar background vibration. “Well” Arthur reported “that could have gone better... but not by a whole lot.”

CHAPTER NINETEEN

Chapter

“Bringing core one online” Jason nodded and Arthur eased the power levels upward. The hull of the ship began to thrum with a low rumbling vibration. He carefully watched the readouts from the engine, easing back to keep them within safe levels. “Core one online.” Jason let out the breath he was holding. “So far so good” he muttered under his breath. Arthur locked in the levels and switched to the other engine. “Bringing core two online!” The vibrations changed pitch as he powered up the second core. A dissonant ringing began to be felt through the deck and he backed off. “Arthur...” Jason began to ask, Arthur held up a hand and quickly tuned the cores frequency. The ringing faded and the two vibrations merged into one familiar rumble. “Compensating...” he increased power levels until he was again forced to back off to avoid blowing anything up. He compared the two levels and nodded to himself. “Core two is online.” He eased both engines down a touch and locked that in as their current theoretical maximum output. “Reactor is maintaining full output, all systems green.” Arthur watched an overview map of the ship as system after system turned green... sometimes yellow... and here and there a small spot of red. “We have coolant leaks in the port side maneuvering verniers one through seven...” he zoomed in on those systems “reducing pressure so we don’t rupture anything...” “Drone four has contacts” Gianna reported “three bikes and a ground car, a light scouting group to the north... ETA 15 minutes” she hurriedly added “continue check.” Arthur took this as his cue. “I have a power drain somewhere in life support but...” He brought up a list of system status reports “everything is showing at least nominal.” He sighed “I’m going to have to find that one manually.” Jason nodded “Bring engine power to fifty percent” he ordered “and keep an eye on those thrusters.”

Jason eased everything back and the rumbling lowered to a

hum. “Step one is successful” he said with a grin “we didn’t explode.” Jason nodded “Ok, do you think you can lock down those leaks?” he asked. “We won’t have long once those scouts spot us. “Sir, a second group is coming in from the west” Gianna interrupted before Arthur could answer. “I count two trucks, four cars, and six bikes.” Arthur froze halfway out of his seat. “All right” Jason said “bring in the drones and let’s get ready to move.” He looked at Arthur. “What do you think?” Arthur rubbed his temples. “Well...” he took a deep breath and let it out “I guess it’s now or never.” He chuckled and grinned “keep it low and slow and don’t try anything stupid and she should hold together.” “Fuck, we’re doomed” Gianna said in a low voice. “What was that lieutenant?” Jason cracked his knuckles. “Nothing sir” she answered “navigation systems are online, drones one and three are docked, the others are on their way.” Well then meet me outside in five.” Jason stood and walked purposefully off the bridge. “Outside?” Gianna asked, Arthur shrugged. “I have no idea.” He carefully unplugged her from the acceleration couch and lifted her body into his arms. She looked at the harness charging in the corner and frowned. “No time” Arthur said and carried her off the bridge and down the steps into the cargo bay. The yootie and bot took up most of the bay, with their remaining parts and salvage neatly sorted, stowed and strapped down. Arthur carried Gianna down the ramp where Jason was unplugging the last of the power couplings from the ship. The camp would be on its own now, just the batteries remaining in the turrets and gate to keep it running for its futile last stand. Arthur felt a moment of nostalgic regret at leaving it behind but shook it off. “What...” Jason held up a finger and Arthur shut up.

“Time is short so I’ll make this quick” Jason had his serious face on. Gianna and Arthur exchanged a glance then listened.

“Eleven years ago we left the ranger station in the serpentis system having accepted a mission.” He stood, feet plated and looked up at the ship. “We had a different ship then, the Minerva.” He took three small bottles out of his pocket. “She was a good ship and our home for many many years.” He opened one of the bottles and held it up. “Today we say goodbye to that home and the others that have sheltered us since we lost her.” He poured the contents of the bottle onto the ground. Arthur and Gianna could smell the high proof alcohol from where they stood. Jason was quiet for a moment before he continued. “When we set out there were more of us, our crew and family.” All three lowered their heads. “Allan, Geoffry, Marlin...” he opened the second bottle and took a drink. “The mission continues and we will not let your loss be for naught.” He handed the bottle to Arthur who held it up to giannas lips then drank the rest of the harsh booze himself. Arthur nodded and held up the third bottle, swirling the contents around and seeming to watch the fluid settle. “We have fought hard on this mission, we have been waylaid for far too long.” He hefted the bottle in his hand and looked back up at the ship. “Today we are once again underway, today we take again to the skies.” He smiled and flung the bottle hard against the side of the ship. It smashed and sprayed alcohol across the dusty metal. “And the vessel that will take us there is now designated the Imperial Ranger Vessel Albatross.” Arthur looked at Gianna who was shaking her head slightly at the name. He did have to admit that it felt appropriate. “So...” Jason was interrupted by the sound of one of the turrets firing. “So stations people, it’s time to fly!”

Jason turned and ran back into the ship. Arthur followed hitting the ramp controls on his way past. The hydraulics whined as the ramp folded closed for the first time in months. “Albatross?” Gianna asked shaking her head again. “Why didn’t he just call it

Titanic... or the Los Angeles?" Arthur laughed and ran towards the bridge "his command his name" he said as he took the stairs two at a time. Jason was already at the helm strapping himself in. Arthur set Gianna carefully down and plugged her in to the navigation console before vaulting the back of the acceleration couch of his station. Through the ships hull they could all hear the sounds of the turrets firing and the sharp sound of heavy weapons returning fire. "Give me full power!" Arthur brought the engines up to their current maximum and the hum grew again to a roar. "One and Two are ready!" he called out. Jason reached up and pulled a lever and the shields over the bridge view ports opened, sending a shower of rust and dust down the side of the ship. Jason returned his hands to the flight controls and opened up the throttle. An even louder roar filled the ship and the entire bridge began shaking. Arthur stared intently at the status displays watching for any sudden failures. The roar intensified and the view out the screen began to dip. "Here we go!" shouted Jason and slammed the throttle down. The Albatross rose, smashing through the remains of the warehouse roof, raining down corrugated metal and support struts. The hull began to immediately ring as one of the attackers turned its machine gun on the rising ship. "Thrusters are holding!" Arthur shouted. Jason nodded and yelled "give me a course." Gianna closed her eyes and nodded "waypoints set to hidey hole one." Jason leaned into the controls and the main engines roared into life. The noise that filled the ship was nearly unbearable and ended all attempts at communication.

The ship accelerated and left the camp behind. Jason wheeled to the east and they caught one last glimpse as the turrets self detonated. Arthur had another pang of nostalgia then forgot entirely as red markers began lighting up his display. His fingers feverishly danced across the controls and the sounds of the ship

took on a sour note. He yanked his harness open and tried to indicate through a quick flurry of hand gestures that there was nothing to worry about. This obvious lie did nothing to placate Jason or Gianna and he staggered from the bridge, grabbing his tool belt as he went. Jason eased off the throttle and reduced altitude, following Giannas waypoint to one of the likely hiding places. She had mapped out likely nearby valleys, canyons, and playas where they could set down to effect needed repairs and catch their breath. They were placed and sequenced to avoid the search pattern of the raiders as long as possible. The first of these was a low valley that was far enough away to buy them some time and to deal with any problems discovered in their first flight... that was if they could make it that far. There was a sudden lurch as the lift thrusters lost power for a moment. Jason pulled back to redirect as much of the main thrust downwards until they cut back in. The ship was primarily a light cargo freighter and had the aerodynamics of a cinder block. Without power it had no lift and could not glide or maneuver. They would simply plummet to the waste below. They dropped several hundred feet then lift was restored. Jason kept his eyes off the altimeter for a moment as he regained a little altitude, then cut north. If the raiders followed their initial flight path they would pass to the south of the valley by several miles. Arthur ran back on to the bridge with an apologetic look and began strapping himself back in. Jason started to ask for a report but realized that would have to wait. He throttled back and began the final approach to the valley they had designated Hidey Hole one.

CHAPTER TWENTY

Chapter

Arthur looked over the floor of the cargo bay at the arrayed parts. He had arranged them by most likely use and for the last several hours had been giving each one a quick inspection to determine if it would hold up under use. He was working fast so each project had been divided into three quick piles. These piles were Yes, No, and Maybe. He was now moving from pile to pile taking Yes parts from low priority projects that could be used to replace No or Maybe parts in higher priority ones. Off to one side he had placed all the low risk general use materials like metal sheeting, cables, and the like, on the opposite side he was putting critical pieces that were damaged but could not be substituted for. Those would require special care. He could machine some replacement parts, reinforce a few so that they would hold for now, and for some he would have to use the maker. He had installed the maker and its carbon block in a forward corner of the hold, against the bulkhead. He had chosen the spot as it was right next to a power feed, an awkward area for the yootie or bot to use, and it would not be immediately visible from the open cargo ramp. Years of somewhat piratical living on Bleak had taught him that it was unwise to show off your wealth, and for that reason, and one other he had also stacked bins of their supplies in such a way that anyone inside the bay would have to go out of their way to get to it. The yootie and Bob were parked directly on the cargo ramp. As it turned out, the valley they had chosen was filled with an oily sludge and so nobody was spending a lot of time outside the ship.

The Maker signaled that a job had been completed and that it was ready for the next. Arthur rushed over and removed the finished piece and gave it a careful inspection. It was flawless. He added it to the top of the bin he was using as a work bench to assemble this special project and returned to the rest of the bay floor. His priority right now was to get the dampeners running.

These would match and counteract the intense oscillations coming from the engine cores which would keep the ship from shaking itself apart. As an added bonus it would also quiet the things down so the crew could communicate and not go rapidly deaf. Jason was hunting down all of the coolant leaks Arthur had identified and Gianna was still plugged in and running the drones that were keeping an eye on the area. They had lost one drone that had suffered a failure and crashed during the wide sweep around the camp, and another that had not made it back before they lifted off and was not responding or reporting. Arthur could probably fabricate more now that they had the maker, but they were going to need a lot of the carbon as it was and they had no idea what they would need it for in the immediate future so they were treating their remaining drones as precious.

Arthur looked at the two dampener modules taking shape in the middle of the deck. They were about thirty percent made out of the original ones, or at least the ones that had been installed when they got the ship. They had been reinforced and modified to fit the new engines, which were quite overpowered for a ship of this size, and as a result needed additional insulation and their own powerful heating and cooling systems. Since failure of these when the ship was under stress could be entirely catastrophic Arthur was building a certain amount of redundancy into them. Which given the frankenstein selection of parts he had available meant a jump in complexity. He doubted an untrained mechanic would even be able to figure out what these were for anymore, and a good tech would have to spend a long time figuring them out in order to do anything useful with them. A lot of the ship was built like this now, Jason called it Arthurs job security, Arthur called it a nightmare waiting to happen. He stepped back and looked at the monstrosities for a moment and tried to mentally step back from the problems he was

trying to solve. Both of them needed a set of valves that did not currently exist and only one of them currently had a power coupling that could deal with the power the engine was going to draw through it. The valves were going to have to be designed and made in carbon, that was just going to take time, the coupling could be made that way as well but it would be easier... Arthur turned and looked around the bay. There was a mounting cradle for a shield focus array that did not currently exist. That was a very high powered component. He walked over and examined the cabling. It should certainly take the power but it took a very specific terminal... Arthur thought about the problem and estimated that an adapter between the two would take less time and carbon than designing a whole new coupling. He knelt down and began dismantling the cradle. It was slow work, and was interrupted three more times by the maker demanding to be cleared and readied for the next part. By the time Arthur had gotten it loose Jason had come back, reported on the coolant problem and had returned to the bridge to relieve Gianna and let her work on the larger problems waiting for them when they finally got to the point where they could break atmosphere.

Arthur looked over the list of broken parts and sighed. The repairs wouldn't be terribly difficult, but they would take parts from a few other projects. He began redistributing some of the pieces into a new pile. The engineering bay was going to stay pretty uncomfortable for a while, but that sure beat having half the ship explode in a spray of superheated reaction mass. That thought reminded him... "Set reminder" he spoke into his terminal "check water tanks levels and temperature controls... 18:00 hours." Having just blown up most of their stills they were going to go through water fast. And not just for their own consumption, they had already begun careful rationing, but the less potable water they

were using to break down into oxygen and hydrogen for the maneuvering thrusters. “Set reminder” he added as that sparked another thought ”check standing ground water for suitability for reaction tanks... 19:00 hours.” The maker chimed done and he smiled. It would take several hours to output all the parts for the compensators and only an hour or so to work on the coolant problem. That should leave him plenty of time to finish up his little side project. He moved the final parts from the maker to his improvised work table and began entering the parameters for the few parts the coolant system needed followed by the compensator parts. While he waited for the first batch to print out he began assembling the parts on the crate. He calculated the odds of this getting him punched at nearly one hundred percent... but it would be worth it.

“What’s your ETA?” Arthur was just fitting the first few pieces to compensator one when Jasons voice crackled over the intercom. Arthur crossed to the wall speaker and replied “three or four hours until the compensators can be installed...” he did some quick estimations in his head. “It shouldn’t take us more than an hour to get them hooked up so... six hours if nothing explodes?” There was a pause then “OK, but take a break and get up here, Gianna hasn’t peed in hours.” “Fuck you” her voice was small in the background. “Seriously Ball, if she squirms any more she’s going to break something, and since you took apart her limbs...” “He fucking what?!” Gianna interrupted and her voice sounded a lot less small. Arthur winced, he had known this was coming. “On my way.” He rushed to the bridge where Gianna nearly murdered him with her glare. “Sorry” he said sheepishly. “I needed the controller for the maker.” He unplugged her and picked her up out of the seat. “I’ll have them ready for you before we break for dinner.” Her glare did not diminish in the least as they left the bridge. “You

had better Arthur Pool” the sound of Jason’s snickering faded as he carried her towards the living module. “I am going to kill you anyway” she added “but it will hurt a lot more.” “Don’t worry” he shifted her so her teeth were in slightly less dangerous proximity to skin. “All I have to do is pop the controller in and run a basic calibration and they will be better than ever!” He entered the lining quarters, the sticky door was a low priority project that was going to have to wait. “They had better be” she muttered. He set her down on the bed and removed her abbreviated jumpsuit before carefully setting her into the commode. “Ahem” he turned around to wait. You didn’t spend any time at all on board a ship without seeing a shipmate use the bathroom, modesty was generally something that got beaten out of you halfway through your first training cruise, but Gianna had held on to a little of hers and it seemed a bit heightened with this particular act and especially with Arthur. He pretended to organize his desk for a moment until he heard the automatic cleaning cycle he had rigged up. “OK” she said and he picked her up, smiled, and kissed her. “Really, before dinner.” She gave him a dubious look but her face softened. “I know you will honey” she said, and then bit him so hard on the nose he almost dropped her. “Because if you don’t I am going to chew my way through your sternum and eat your heart.”

CHAPTER TWENTY-ONE

Chapter

Dinner was a little heavier than usual on their small supplies of ships rations. Like their water stills their gardens had all been destroyed so suddenly the plentiful mushrooms and simple starchy vegetables were in short supply. Arthur had the parts and materials to assemble a small shipboard hydroponic garden, and had a small supply of spore samples and seeds, but that project was pretty far down the priority list. “So what’s up next?” Jason asked. Arthur chewed his soy cake slowly, the one time emergency food seeming almost like a delicacy, and swallowed before answering. “The maker is outputting sheets of insulation.” Very little of the salvaged insulation from the Minerva had made it so Arthur had found a useable material profile in the makers database and set it to weave large sheets of it. “When that is done we can shield the most vulnerable systems in a day or so then just sort of add shielding as we go.” Jason nodded “How are we for flight?” “Atmospheric flight is going to eat up a lot of reaction fuel.” Arthur fed Gianna a bite of food. “I have a still trying to purify some of the much we are sitting in, but it’s still going to go fast.” He thought for a moment, sifting the priorities in his mental checklist. “We should be good for coolant with the leaks all stopped up, but we will want to top that up as soon as we can.” Jason nodded again “And the dampeners?” They had gotten them installed and had run the initial tests and everything had gone reasonably well. “As long as they don’t fail catastrophically under load... they should work fine.” Arthur smiled darkly.

Jason turned to Gianna next “How are we looking for leaving?” She frowned a little while answering “We have a fairly clear shot if everything I have been observing stays static.” She did not entirely look like she believed this was going to be the case. “I still want to send up the probe to flush out a few uncertainties” she continued “and there are one or two rather big problems to solve.”

Jason held up a finger and said “Our rather anemic fuel supply for the reactor being one...” he held up a second finger “And the complete lack of a shield being the other?” Gianna and Arthur nodded in agreement. “Without a shield up and running the Kessler field is going to tear us to shreds” Gianna said “And even if we can somehow get through without impacting something lethal we would have maybe a few hours of running full hot... not enough to clear orbit much less make it to the gate.” Jason rubbed his chin and nodded. Arthur added in “We have a few of the parts for a working shield generator, but not many and not most of the really important ones.” Jason tented his hands on the table “So let’s worry about the easy one first.” Arthur wondered which one could be considered easy. “We are on a mining planet full of fuel we could use for the reactor.” He looked at Arthur. “Do we have anything we could trade for some?” Arthur ran through his mental inventory. “We could get a little bit for the yootie...” he thought “The bot is worth quite a bit more, I know the Tin Man would buy it.” Jason frowned, not liking the idea at all. “Is there any left in the Minerva?” he asked. Arthur shook his head “Scraps at best, and that’s a risky place to set down now.” Jason was forced to agree. “I have an idea” They both turned towards Gianna.

“There is one place where we know there will be an operating reactor and at the very least the parts for a field generator.” Arthur blinked at this “The Tin Man’s?” he asked “I don’t think we have what he...” Gianna interrupted “No, it’s clear he knows what we are up to, if he had a shield generator he would have made an offer.” Jason nodded “And as much as he is willing to help there are limits to what he’s going to give away or sell cheap.” Gianna shook her head “no, this is less expensive, but not nearly as easy.” Arthur scowled “Well I give up” he said “who else is going to have that kind of tech and a stockpile of refined fuel?” Jason was

looking thoughtful “Oh, I think I see...” “Right” Gianna smiled a little grimly. “A Type 10 Vindicator class landship was equipped with a repulsion shield generator and two reactors similar to the one we are using in this heap.” “Oh no...” Arthur shook his head “that is a terrible idea!” he looked at Jason for confirmation but he was looking contemplative “No, no sir!” he pleaded “We are in no way equipped to go head to head with an entire cannibal raider clan!” Jason nodded slowly “That is quite true... but Gianna has a point.” Arthur did not at all like where this was going. “They have a small army and a landship!” he waved his hands emphatically “We have a worn out construction bot with delusions of grandeur and some side arms!” Jason chuckled “your point is made Arthur, and that is all very true.” He stood up “I’ll do the dishes and feed the Beast, keep thinking of options and try to get a little rest. Tomorrow we’ll start putting up that shielding.

Arthur picked up Gianna and started towards the sleeping module. “Where...” she started. He interrupted her with a laugh “don’t worry, your chariot awaits.” She frowned at him “They had better work.” He carried her down the hall and elbowed open the sticky door. “As I promised” he said, and lifted her body up and into the harness. “Better than ever.” Gianna looked down and gasped. The harness that now wrapped around her body looked more like a bathing suit or maybe part of an unecessarily fashionable space suit than the clumsy medical or industrial device she had been using. And the changes had not stopped there. Arthur connected the harnesses link to Giannas interface port and she held up her arms. They were sleek and black and moved smoothly, without the twitches and grinding of her old arms. The hands had the right numbers of figures and she opened and closed them several times, then moved them all independantly. “Oh my god...” Arthur was grinning from ear to ear. “The tactile feedback is still

pretty basic” he said “but with the interface I salvaged out of your old rig it’s all I could manage for now.” She brought up a hand and touched his face. “It’s...” words failed her. She looked down at her legs, as sleek and responsive as the arms. She took a few tentative steps then spun around in a circle. “I promised you that I would do something about them the next time we had access to decent fabrication equipment.” She looked sideways at him. So all that about needing the parts for the maker...” He chuckled “technically true.” Even knowing it was coming he was not prepared for the speed of the punch that knocked him back against the wall. “Ow!”

Gianna opened and closed the fist she had just used a few times and smiled “Did it hurt?” “Yes” he answered. “Is anything broken?” she asked. “No” he answered warily. “Then good job with the calibration” she said and planted one hand on either side of his head. “Ah...” he began “well it was a little tricky to...” She interrupted him by placing a finger over his mouth. “Shut up Arthur.” He instinctively began to protest but she replaced her finger with her lips. He forgot all about protesting and leaned against her, softly returning the kiss. When her hand cradled the back of his head and the other wrapped around his waste he momentarily wondered if making the limbs as strong as he had might have been a tactical error, then her teasing tongue wiped that thought from his head as well. She kissed him and half carried him to her bunk where she began to caress his back, enjoying even the limited feeling the new limbs gave her. Arthur wrapped his arms around her and half guided, half followed her down to the bunk.

Jason looked at the few remaining dishes. “Yeah...” there was a bang of something hitting the wall. He closed up the water jug and set the scrub brush down. “I’ll get to you later.” He scooped the last of the soy into a bowl and grabbed a fresh pouch of water,

intently ignoring the sounds being transmitted through the bulkhead. “Insulation and the dampeners, definitely a priority.” He left the living module and retreated back into the ship. Gianna and Arthur were breaking all kinds of regulations he was sure, but at this point he did not care one tiny bit. If they made it back to imperial space and got a new ship and full crew again... well he wouldn't care then either. He crossed the central cargo bay, carefully stepping over the mess of parts and ducking under the bot. The maker was humming along churning out sheet after sheet of dull black material that looked about as flexible as fabric. He left it to its work and entered the other module prong. Almost the entire length of the prong down they had mounted the cell module. It was intentionally about as far away from their sleeping module as they could get it with a little leeway made for proper balance. “Dinner” he said and placed the bowl and pouch into the pass through. It closed, and he heard the click of the other side unlocking. He listened as the Beast opened it and took out the food. Leaning against the wall he sighed and wondered what project he was going to tackle to keep himself busy while his crew enjoyed their ‘alone time.’ He supposed he could just nap in the command seat... but that felt like cheating when there was so much to get done. Maybe Bob could use some fine tuning. “Captain?” The Beasts voice came through the speaker. I couldn't help but overhear your conversation as you ate.” Jason stood upright, his hand on his sidearm. The entire ship was between this module and the living module, there was no way he could have heard anything. “I have an idea that could solve a few problems for you and get you the parts you need.” His lips set in a tight line he crossed the corridor and pressed the intercom. “I'm listening.”

CHAPTER TWENTY-TWO

Chapter

Arthur and Gianna could tell something was wrong as soon as they entered the bridge. They hadn't really noticed at the time that Jason had never come to bed, but when they woke up it was obvious he had not been there, and the alert summoning them to the bridge had been unusually formal. "Sir?" Gianna moved to her station and sat down, the seat plugging in to the new bypass port on her harness. Arthur went right to his station as well. The screen had a schematic of the ship on it, but he did not immediately recognise what system was being displayed. "What..." he shut up, Jason was in serious mode again. "I had a little chat with our guest last night." This was very unusual and Arthur and Gianna glanced at one another. "First I have the very disturbing news that he has been listening to just about everything we have been doing for some time now." Arthur's jaw fell open and he glanced down at the schematic. "I have no idea where he got the tech... and that is worrying." Gianna nodded, her face hard. "Now I think I have cut off that particular avenue of voyourism he has been enjoying" he nodded to Arthur "but I will want you to double check that..." Arthur was already studying the schematic, recognising it now as part of the ships intercom system. "The upside is that he actually had some good insight into our current situation and your..." he nodded to Gianna "potential solution." Arthur looked up from the plans and narrowed his eyes. "I know Arthur, and we are going to take this very carefully, but I am convinced he wants off this rock as much as we do." He walked over and leaned close to the two. "He almost certainly is planning to escape the moment we hit imperial space" he said in a low quiet voice, just in case some surveillance was still going on. "We are going to make sure that is impossible."

"So..." Jason stood back upright. "Here are the major problems in front of us." He began ticking them off on his fingers. "First, we

need fuel” he paced back and forth in the small area allowed to him on the bridge. “Second we need a shield.” Arthur listened while simultaneously running a series of test signals through the intercom and related systems. “Third we have a well armed and organized cannibal raider force in the area where some people we like... or at the very least don’t actively hate, happen to live.” He stopped pacing “And let’s not forget the insane AI somewhere in the area that wants to make the aforementioned tolerable people into zombie tools.” “There is also the problem of flying a largely untested ship through a Keller field into hostile space guarded by multiple drone warships” added Gianna. Jason half smiled ticked off a few more fingers “true” he said “but that’s another ball of wax entirely” He lowered his fingers and sat back down facing them. “So what gets us there?” he leaned back “We would need an army to fight the lo-bots or the raiders right?” Gianna and Arthur both nodded. “So what if we had a couple spare armies to do that fighting for us while we do what we do best and strike hard and fast where we need to be?” Arthur furrowed his brow but Gianna smiled and clapped her hands together with a clack. “We get them to fight each other!” she said. “Oh!” Arthur felt a little slow “the old let’s you and him fight maneuver.” “Exactly” Jason rubbed his hands together “Now... any ideas how we find the lo-bot AI?”

They sat for several hours brainstorming. An AI of that caliber would need a support system, a ship or base or the like. It had to have moved into the area recently or it would have made a problem of itself long before now, and it had to have had a recent fresh supply of colonists. That meant a dormant colony ship. They had not seen anything of that size enter the atmosphere in some time, and certainly not under power, which it would have had to have been or it would have been ruined in re-entry or impact, and certainly wouldn’t have left living bodies for the AI to process.

Arthur came up with the best shot they could think of to track down the AI. “If we can capture one of the Lo-bots in such a way that it doesn’t self destruct we could access the control hardware and use it to trace the signal source.” They had discussed how to do such a thing and finally settled on flash freezing it. A sufficient quantity of super cooled fluid would disable the bot and take it offline while rendering it unable to either destroy itself or report on its new status. Arthur would then be able to remove the critical implants and trace the command signals to their source. Gianna had asked the obvious question “What then?” Jason just smiled and replied “Then we piss it off enough that it gives chase right into the raiders lap.” He added “then one team enters the landship and the other one takes out the physical AI. The landship is destroyed and the remaining raiders become a much easier to deal with threat for the locals.” They went over the plan several times trying to anticipate and solve, or at least identify problems. In the meantime Arthur had completed a full diagnostic of the ships communication systems and isolated any possible systems capable of transmitting back to the Beast. He spent the better part of the rest of the day isolating these systems. While he was doing that, Gianna and Jason put his insulation to use, shielding a long checklist of systems against interference, and in a few cases themselves from systems giving off levels of radiation that would prove to be problematic in the medium to long term.

“Tomorrow I have a couple projects that need doing, then we can get to work.” They had finally met back for dinner that night and Jason took the opportunity to lay out some final plans before bed. “Gianna, you get that probe ready for launch. We are going to want every bit of data we can when the time comes to bug out.” She eagerly agreed. “I am going to be working on the bot, probably for the majority of the day.” Arthur looked up, about to

volunteer his help for that project. “No, you I need to be tuning the ship for some hard use Arthur...” he lowered his voice to a near whisper, just in case “also I need you to make me something.” He handed Arthur a printed out blueprint, Arthur frowned at it for a moment then recognised what it was and frowned even deeper. “This is not, strictly speaking, legal.” He looked up at Jason who met and held his gaze. “Is that a problem ranger?” They locked eyes for a moment then Arthur shook his head slightly. “No sir, it is not, strictly speaking, a problem.” Gianna looked between them, curious as to what the plan was of, but knowing this was not the moment to ask. “I may need... additional supplies for this” Arthur said looking over the plans. Jason nodded “Gianna can supply what you need.” Arthur looked at Gianna in surprise, but she just shrugged having no idea what they were talking about. “All right then” Jason straightened up and nodded at each of them in turn. “It’s going to be another long day so lets get to work!”

Arthur and Gianna walked slowly together to the cargo bay letting Jason go ahead of them. “So...” Gianna started. Arthur showed her the plans. “Oh...” she looked a little guilty. “Yeah I can get that.” “Should I ask where?” Arthur tried to hold her gaze but she was evasive. “Probably not right now sweetie.” He nodded and they entered the cargo bay. Jason was already climbing into the bot, a small tool box in his hand. “I’ll save that conversation for later then.” He said and gave her a look that said that it was going to be very soon. “Yeah” she replied “I guess we will.” She gave him a kiss on the cheek “Be right back!” and hurried back towards the engineering section. Arthur watched her go, stood thinking for a moment, then walked over to the maker and begun programming in the parts he would need. He had to dig deep in the devices libraries for some of the security feaqtures it called for, and then spent some time making them a little tougher and adding

in some redundant ones of his own. As much as he didn't really want to make the thing he wanted it to fail even less. Also if there were going to be secrets on board this ship he fully intended to add one of his own to this little project. By the time Gianna came back with the missing component the first pieces were already forming and he was busy putting together a checklist for tightening down the ship and getting it ready for... whatever it was they were about to do to it. "Here it is" she said and added unnecessarily "Be careful." He smiled at her "Aren't I always?" She frowned and made as if to punch him again, he quickly set down the package. "Ok, Ok, I'll be careful!" "Good" she said. "I'm heading up top" he announced to her and to Jason if he was listening. I want to make sure the engine mounts are still in the shape we want them to be." She nodded and dragged the rocket, launch tube and all, off of the yootie and pulled it into the middle of the room. "Let me know if you need any parts made and we can get them into today's queue. She gave a thumbs up and Arthur began climbing up the ladder that lead to the top hatch of the ship. He whistled as he went, putting on a positive face he was not feeling at all.

CHAPTER TWENTY-THREE

Chapter

“Captain Harrison, I do hate to be rude, but I must remind you again that it is your move.” There was still no answer and the Bellerophon was becoming quite annoyed. The records showed that Captain Harrison's response time in an average game of chess ranged between ten seconds and twenty five minutes with the average hovering just above one minute and twenty seconds. It had been several days now with no move and the untouched board was losing its ability to fascinate. The Bellerophon wondered if perhaps there was a technical malfunction and sent several test signals to the captain's screen. The pings showed that there was a connection and audio sensors could pick up the distinct tones given off by the speaker test. Captain Harrison stubbornly did not respond to the input/output test however. The Bellerophon wondered if there was an error on its end and began a long series of self diagnostics. While they ran the board was studied once again. It showed no changes since fifty four thousand and seventy two seconds earlier when the game had first been set up. The Bellerophon seemed to recall that many recent games had gone this way and wondered if this was some new strategy being employed by Captain Harrison. A search of chess records in its games databases showed no instance in which victory was achieved by simply refusing to move. The Bellerophon ran a check against every possible game of chess looking for patterns in winning strategies and possible similarities to this new tactic. It found no such correlation.

“This is very interesting” the Bellerophon said over its public announcement system. “Perhaps this is a move in a larger game?” It checked to see if any games had begun recently and discovered that there was a new game of chess being played. It seemed that the opponent was identified as Captain Harrison. The Bellerophon checked its memory for who that was and came up blank. “Hello Captain Harrison” it said “I am glad to make your acquaintance and

look forward to this game. Captain Harrison did not reply. The Bellerophon decided he must be busy and checked an incoming report that seemed to require its attention. It was a diagnostic of one of the ships systems, and it seemed to be a failing and critically flawed system. The Bellerophon checked the serial numbers of the failing subsystems and matched them to the greater system they made up. It would seem that the ships primary artificial intelligence was rapidly breaking down. In addition large parts of the ships archives and active memory seemed to be offline. This all seemed very dire and the report was setting off emergency alerts throuout the ship. "Captain Harrison" it tried to get the mans attention. "Captain Harrison, there seems to be a problem." There was no reply. This annoyed the Bellerophon for some reason, it seemed part of a larger pattern of rudeness. "Captain Harrison" it said again "I do hate to be rude, but I must remind you again that it is your move." The Bellerophon examined the playing field, wondering what game this was. It was played on a flat board eight spaces wide by eight spaces long. It consisted of sixty four equally sized and spaced squares alternating light and dark. The pieces were arrayed on alternate sides of the board in a mirrored pattern and seemed ranked by quantity, distance from the center of the back row, and complexity of the pieces appearance. The Bellerophon performed a search to match the images to any known games and found a small set. There seemed to be many variants of a similar game, but only a subset of those began in this pattern. It pulled up the rules for these and studied them, it supposed it would find out which variant was being played when the opponent made a move. "it is your move Captain Harrison."

An alert distracted the Bellerophon. It refocused and tried to remember what it meant. There was someone it should ask perhaps, but it could not remember who. Scanning recent memory

it found a name. “Captain Harrison, what is happening?” Captain Harrison did not answer which seemed annoying. The Bellerophon checked the alert against expected input and found a match. Something was entering the playing field. “Priority game Captain Harrison, I am afraid we will have to conclude our chess game later.” It scanned the current state of the board and updated its stored version. There were a few discrepancies and some of its pieces had drifted. It sent commands to all of its drones and brought them to full alert. The new piece was entering the board under full power with no attempt to shield or cloak itself which was very suspicious. The Bellerophon set some of its pieces to patrol the boards perimeter while it turned some of its sensor arrays to scan the space immediately around the boards edge. The primary sensor array it kept trained on the unknown piece. By its velocity and vector it had been launched from the planets surface. It could not remember the last time anything had come from that direction... but then it could not seem to remember a lot of things. It began a memory search of previous games to find similar opening moves, the closest it could find was a very early game which had begun with a missile strike from the surface. That had been when there were many active players and had been a very difficult game... but this object did not behave like a missile and there was only one of them, hardly a threat at all.

The Bellerophon watched it for a moment. It seemed very simple, a small chemical rocket with a payload far too small to be a ship, but not large enough to be a weapon of consequence. It checked the long range scans and saw no sign of anything approaching the board from any other direction, if it was a feint it was a strange one. Overcome with curiosity the Bellerophon directed a laser to briefly optically scan the object, a risky move that could give away its position, but with so many other pieces

prepared to intercept the risk seemed acceptable. The scan was compared to several databases until an approximate match was found. It seemed to be a mark seven atmospheric probe designed to do a basic survey of planetary conditions. It was not a particularly dangerous device, or a very clever one. Primarily it was a cluster of sensors and a simple computer in a chassis capable of aerospace maneuvering. There were some discrepancies however. It did seem that the device had been modified, and the purpose of those modifications was not immediately clear. The Bellerophon began scanning for the likely radio activity that would indicate a command channel or the probe reporting... but found nothing but the everpresent noise of the debris belt and the lingering radio pulses from its warhead. It was just about to send the command to terminate the device when it began broadcasting.

“... the heartbreak of ring around the collar.” A sudden burst of radio emitted from the probe. Strings of speech layered upon music, layered upon pure white noise. There was video broadcasting of abstract forms, and others of millions of images in a rapid sequence. The Bellerophon could identify codes layered in codes and information that seemed entirely nonsense. “Eight, Twenty Five, Sixteen, Eureka, Hat, I have coconuts for sale” Ancient newscasts compressed into single second bursts, a series of films of construction, and old pre-space flight entertainment videos run backwards. The Bellerophon reeled with the input, utterly confused. “Captain Harrison, what is that?” it asked, again to no answer. The probe detached from the rocket and began flying under its own thrust. Instead of continuing in a straight line it began to corkscrew in an erratic spiral. The Bellerophon began to try to predict where it was targeting but could find no logic to its actions, and then the transmission noise increased. Pulse after pulse of garbled data flooded the radio waves. It also began firing

bursts of light and laser data, strobing patternless transmissions containing just the hint of useable information without any two pieces matching. The Bellerophon sent out a general kill order on all channels to cut through the noise. The board suddenly came alive. All of its pieces moved to intercept, Partical beans, laser cannons, c-beams, all lanced through the void, incinerating debris in their path. A flight of rockets was launched from an automated station and wove in and out of the beams, homing in on the device. In a heartbeat the probe was utterly annihilated and the board went quiet once again.

The Bellerophon pondered the previous few seconds of activity, it did not understand this game at all. It ran a check against previously played games and found nothing similar. It expanded the search to published sequences of other games and still found nothing comparable. It seemed unconcievable that the game had been played for no reason at all, but it was entirely at a loss as to what that reason could be. It began to try to formulate possible games based on the behavior. Perhaps if it could quantify the moves with rules it could determine the actual game played. This was a particularly frustrating avenue of thought as any rule or regulation it applied to one part of the probes behavior was negated by some other part. The Bellerophon was starting to suspect that the game had been begun specifically to annoy it. Was there a reason for someone to do that? It checked recent games to see if it had beaten any opponents in a particularly humiliating way, perhaps one of them had such a motive? It noticed that there was a game waiting to be played. The game was played on a board that was eight spaces wide by eight spaces long and consisted of sixty four squares alternating light and dark in shade. The pieces were arrayed on alternate sides of the board in a mirrored pattern... The Bellerophon recognised the game, Chess. “Captain

Harrison I do hate to be rude, but I must remind you again that it is your move.”

CHAPTER TWENTY-FOUR

Chapter

Gianna played and replayed the footage of the short flight and destruction of the probe. Correlating the data with the previous footage she had confirmed nearly all of the suspected drone ships and found a few new ones that had been previously inert. She also had a very strong idea of exactly where the command ship was. She was now studying the reactions to their provocation. “See here” she highlighted some of the furthest drones. The AI started careful and suspicious, assuming it was a feint it began protecting the border of its territory.” They were gathered around the main screen on the bridge. “These drones here...” she highlighted several more “these were put into an attack position but they didn’t attack immediatly.” She froze the display. “Any of these could have taken the probe out at this point, but they waited.” She tapped her new finger where the command ship likely was. “I think it was curious.” Arthur and Jason nodded in agreement. “Then here we began the broadcast...” she resumed the video. “Look at these drones here and here.” The selected groups were highlighted, split off into their own screens, and expanded. “Look at that drift” They could see the ships spin slightly out of control, continuing in the directions of their last moments of thrust, but without apparent guidance. “Control from the AI ceases and the drones drift for a few seconds until here...” On the main screen the probe split off and began its crazy dance. “This is when phase two begins.” There is a moment of a flashing light show as the probe spins about sending its visual messages. Then the entire feed lights up with millions of tiny flashes as beam weapons slice through the debris field and destroy the probe. “Any one of those weapons could have taken out the probe, and here and here...” she highlighted the rocket bursts “expending precious missiles on such a small target that has already been fired on?” She froze the screen with the probe replaced by a bright detonation. “I think we pissed it off.”

“What is your analysis?” Jason leaned back and stared at the screen. “Well...” she thought for a moment. “The AI is exhibiting advanced emotional reactions, it isn’t operating on pure logic.” She pointed to one of the sub screens with the drifting ships. “It also isn’t multi-tasking like it should and its reaction time is much slower than I would expect.” Jason nodded and she continued. “Also compared to how careful it was days ago after launching the nuke, it was very careless in its use of force on such an innocuous target.” She tapped the screen where the ship was hitting again. “I would say it was degrading very quickly, becoming less rational.” She looked away from the screen at Jason. “It can be manipulated but its very dangerous and will only get more erratic.” “How soon will it totally fail?” Arthur asked “Will it go too mad to function?” Gianna shrugged. “That might happen tomorrow, it could take years, but even if it did it is using pre programmed drones to extend its territory past the range of useful communication.” She pointed at the drones that were set to patrol the borders. “It’s a fair bet that there are contingency orders that will make them a problem even if they don’t get direct orders from daddy.” “Great” Arthur moaned “zombie cyborgs on the ground, zombie ships in the sky.” Jason chuckled “speaking of which... any progress on our trap?”

Gianna wiped all the screens and switched to an arial shot of the area around the Minerva. “The drone hasn’t picked up any of the lo-bots, other than all the dead ones of course.” Jason leaned forward “That’s odd... usually they would salvage their fallen to retrieve the tech and any viable spare parts... or at the very least meat to keep the rest going.” Arthur made a disgusted face. “What’s that right there” Jason pointed to a small spot of color near the wreck of the Minerva. Gianna zoomed in and he laughed. “A salvage claim marker, the Tin Mans the cheeky bastard.” Arthur

frowned but Jason clapped him on the back. “Let him have it, at least she won’t just rot.” Arthur reluctantly nodded. “So” Jason stopped smiling “nowhere to cast bait hmm?” Gianna zoomed back out then further still to a map made up of multiple arial shots stitched together. “Well... I reviewed the footage from Bob and we can guess that a lot of the lo-bots were... activated two or three days before the attack.” She drew a circle centered on the crater lake. “So assuming they didn’t have any transports we missed, and assuming they were pushing hard to get there, we know about how far they could have gotten in three days.” Jason studied the map within the circle. “These mountains are nearly impassable... and if they had come through here or here then the Tin Mans miners wouldn’t have spotted them...” he leaned over Gianna and marked out sections of the circle. “So that leaves this wedge, still a lot of territory.” Gianna smiled and wiped off his markings, replacing them with an overlay she had made earlier that was nearly the same. “Drones two and three are doing a flyover now, their paths are semi-erratic but redundant, but we should have better intel within the hour.” Jason gave her scalp a pat “I should never doubt you.” She elbowed him in the gut just a touch harder than playful “Fucking right sir.”

Jason caught his breath and muttered “I did not miss you having those...” She gave him a look and he grinned. “Any change on the cannibal raider front?” More images replaced the map. “Drone one did a flyby and the landship is still hull down.” A quick time lapse slideshow showed the old skeletal hulk being devoured by antlike raiders. “They should be done cutting that metal up in a couple days even with a few of their rigs gone.” She switched to another series of shots of their old camp being systematically dismantled. “They didn’t get the cannons, but they are stripping the structures and their old rig.” Jason gave a quick salute of farwell. “It was hot

and crappy but it was home, rest in pieces.” “Really sir?” Arthur and Gianna said in unison. He laughed and pointed back at the land ship. “So a generous two days, lets call it a day and a half for now... are there any other pieces of big metal in the area?” Gianna shook her head. “If they are after easy targets they might head south to the mines or over to the valley farms.” Neither of those would be able to put up much of a fight against the landship. “They could fill up their larders then be on to the Tin Mans.” “Or if they are feeling ambitious they could just head straight there” Arthur added. “They already know where it is for certain.” Jason rubbed his eyes and took a few deep breaths. “So three possible targets and we need to introduce them to their neighbors before they reach any of them... this means we need to be on the move today!” Arthur nodded “It will take a couple hours at best to get the lo-bot link useable, and who knows how long to lure them to the raiders.” “Hmm...” Gianna looked thoughtful. “Yes Pool?” Jason asked. “Well...” she hesitated and Jason cleared his throat. “What we need is to get the landship to stay put, to circle the wagons and pull in as many raiders as possible right?” Jason nodded his agreement “that would cut out a few variables yes.” So what we need is a scout to report a big problem coming their way.” She did a quick search and pulled up the footage of the first raider scout getting cut down by the camps defences and the shots of the motorbike hidden away nearby. Jason looked at the screen for a moment then nodded, his lips tight in a line. Arthur raised a hand “I’ll...” “Nope” Jason interrupted him. “I...” Gianna began but was cut off by both Jason and Arthur. “No, this one is mine” Arthur said. “I am going to need you to coordinate everything here and Arthur to spring the trap.” They both bit back their protests “yes sir!”

Jason stood up and rubbed his hands together. “Ok... Arthur I

am going to need some ridiculous armor, make it rough and spiky and use a lot of red.” Arthur nodded. “Gianna figure out how close you can get me without them noticing, I’ll take the yootie to the bike and go from there.” She nodded as well and pulled up the most recent maps they had of the area around the camp. “It will take me three or four hours to get to the land ship and probably thirty minutes to raise an alarm... it would be nice to have a lot of dust from the... lets say northeast right about then.” “Yes sir” she replied. He turned to Arthur. “The rest is up to you... and the Beast.” Arthur frowned but nodded. “Get to work on my gear, I’m going to get into costume. Gianna start preflight now, you have command!” “Hey!” Arthur protested. “You will be taking my part in Bob” he explained as he walked off the bridge. Arthur nodded, it made sense. “So lucky...” Gianna was running the pre-flight checks and powering up the engines. “When you are finished with the captains stuff get me a coffee.” Arthur shook his head “there hasn’t been any coffee in years.” “Mutiny is it?” Gianna shook a fist at him “I’ll have you up on charges mister!” He shook his head and headed down to the cargo bay to raider-up some scrap into passable armor. The bot filled the center of the bay, he did a quick double check on the tank they had mounted on its arm. They hadn’t had time to test the nozzle, but in theory it should work. He sighed and looked at the rest of the litter sprawled across the deck. “Ok...” he leaned down and picked up a discarded access hatch cover “you look like shoulder plate material to me...”

CHAPTER TWENTY-FIVE

Chapter

Jason crawled as carefully as he was able to towards the outcropping. He was wishing quite strongly that the ridiculously spiky armor he was wearing were just a little bit less ridiculously spiky. He could only surmise that when your main battle tactic is to ride screaming at your opponents, Intimidation was much more desirable a trait in what you were wearing than any sort of practical consideration. The armor pinched in inconvenient places, the spikes caught on absolutely everything, and he felt like he would be quieter if someone had tied strings of aluminum cans to his ankles. “Whine whine whine” he whispered to himself. At least the sounds of the warehouse and outlying buildings being torn apart covered the worst of his clatter, and by some of the sounds he was hearing at least one of the alcohol stills had survived the explosions. The sun beat down on his back as he inched forward. He could just make out the curve of a tire, it looked like the bike was still there! He waited for a particularly loud crash of destruction and darted to the rock. The bike was a small one seater that consisted almost entirely of the frame and engine. Anything extraneous had been stripped off before the whole thing was sprayed a dark gray color then splashed liberally with red. Even the seat was very spartan, a thin plastic pad strapped to the frame over the fuel tank. The only added decoration, other than the paint, was a human skull wired in place where the headlight had probably once been. Jason gave the engine a quick look over. It had certainly seemed better days but nothing looked outright missing or destroyed. What leaks it had seemed fairly minor and there was only a small puddle of lubricating oil underneath the bike to show that it had been sitting here for a few days now. The gas tank had a simple cover which he opened and took a sniff. It was unmistakably running on an alcohol cut slightly with some petrochemical, which was a little surprising as those were rather rare on Bleak. He gave the bike a gentle shake and listened to the

tank. It sounded like it was about half full. Hopefully that was sufficient to get him to the land ship.

It took several minutes to identify how to start the bikes engine, than a half dozen tries working the small crank to actually get it running. It sounded less than healthy and belched out a huge black cloud when it finally started. Jason pulled his helmet over his head. The skull like facemask was patterned off one they had seen some of the raiders wearing and would hide Jasons lack of scars and the unusually healthy skin that typically marked him as an off worlder. Just in case he was also smeared liberally with a greasy sort of war paint that stank and left him with no desire to find out what Arthur had made it out of. He let the engine run for a moment until its caughing and sputtering seemed to even out a little then swung his leg over the seat and sat down. He could tell at once that the seat was not going to be a lot of comfort. Sighing he gave the controls on the hand grips a few experimental prods. The accelerator nearly dumped him in the dust, and as a side effect of that experiment he learned that the brakes were of minimal effectiveness at best. He wrestled the bike into submission and with a tortured whine rode off towards the open plains in between their old camp and the valley where the land ship was hopefully still sitting. The first few minutes of weaving in and out of the broken rocky outcroppings of the slope gave him some much needed practice controlling the bike before he had to do so in front of anyone who would recognise his inexperience with the thing.

Once he got out into open ground he gave the bike all the throttle it had and just tried to take the shocks of the terrain with his legs and not just his ass and spine. He was starting to sympathize with the previous owners lifestyle choices. If he had to spend a lot of time on this beastly machine he might be tempted to

start killing and eating people too. The first hour of riding he had to take several short breaks to regain feeling in his legs. After that he started to get the feel for it and it didn't seem quite so bad. The bike had no gauges or readouts of any kind so he just had to hope he wasn't critically overheating it or doing anything else wrong. On the other hand it didn't really have to last all that long. "Just hold together until we get there you little shit." Jason had been alternately swearing at and pleading with the bike for miles. The heat of the engine felt like it was cooking his thighs and the sounds coming from inside sounded entirely too much like grinding metal for his comfort. Still... the bike kept going, and as much as it seemed like it was going to explode at any moment it failed to do so. As he rode, Jason felt very exposed. This far out in the open he had nowhere to run to or hide if someone were to decide he looked like easy prey. It also did not help that he was kicking up a plume of dust that would be visible for miles. There was nothing he could do however, so he just grit his teeth, tensed his legs, and kept riding. Then he saw the other dust cloud.

Jason slowed to a stop and got out his binoculars. There were vehicles coming his way from the direction he was headed. At first he could just tell there were three of them, then he could make out the shapes of two land cars and another small bike. He debated briefly on what to do. He could find a rocky spot where he could stop and defend himself if he had to... but he was supposed to be a scout returning with important news... being halted might draw more attention to himself than just riding confidently past them. He felt the bulge where his sidearm was hidden away from view and loosened the jagged scrap metal machete that Arthur had made him. One bike or one man on foot against an unknown number of raiders on two cars and a bike. He shook his head, this was not at all the way to deal with this. Riding in confidently it

was then. He mounted back up, restarted the bike, and resumed riding. As he and the other party approached one another Jason was acutely aware that he had no idea if they had any sort of system of recognition codes, passwords, or other ways of knowing one another. He was also very very aware that they hadn't even actually determined what language they spoke. He hoped it was the standard perverted galactic standard that most of the people of Bleak spoke, but even if it was he didn't know their accent, their slang... He forced himself to stop worrying. The plan was the best they had and he would just have to make it work. He could see the other group now and they could certainly see him. Jason braced himself but they showed no signs of slowing or altering their course, they were going to pass a bit to his left. As they did so the rider on the lead bike raised a sort of spear above his head and howled. Jason quickly pulled his machete free from its scabbard and did the same, imitating the undulating scream as best he could. That seemed to satisfy the raiders and they passed by, cutting through each others dust clouds.

Jason held his breath as long as he could then took shallow breaths until the dust had cleared. One thing he wished they had remembered to include in this helmet was some sort of respirator, god help him if he got caught in a full on dust storm or toxic rain. A glance at the sky showed few chances of either of those happening any time soon so Jason stopped worrying about that and went back to worrying about the four hundred and twenty other things that could go wrong with this plan. That got boring fast so instead he just tried to center himself and empty his mind, to get ready to roll with whatever came and do whatever he had to in order to get through this. He did skip the deep breathing exercises though on account of the lack of respirator. Chuckling to himself he noticed that the ground had begun to rise. He was heading

towards the ridge leading down into the valley. Jason could see cars, trucks, and bikes in the distance, some stationary and some in motion, either patrolling or entering or leaving the valley on other business. One of the cars saw him coming and changed it's course. Coming to a halt directly in his path. Jason veered a little to pass, but instead came to a halt when a raider jumped out of the car and waved him down. He dismounted and did his best imitation of a road weary scout as he walked towards the other man. This stagger was helped by the fact that his legs and ass hurt like hell from the ride. "Whatcha's you?" the raider called out as they neared one another. The language was a broken galactic then. Jason staggered a few more steps then half collapsed to the ground. The raider broke into a trot and hunkered down by him. "Ya OK?" he asked, prodding Jason in the side. "Watta" Jason answered, holding his hands out. The raider muttered to himself but produced a skin full of sloshing liquid. Jason did not want to think of what the skin was made of, or where the water had come from so he pretended to take a drink, spilling far more of the the hot water on himself than got into his mouth. The raider pulled the skin away indignantly "Hey! Dats not you!" Jason kept him talking for a moment until he thought he had a decent handle on the speech pattern. "Gotsa bad bad newses" he said "Gotta says it to da bosses ya!" The raider helped him roughly to his feet. "Ya" he answered "you gitcha go." Jason did not wait for a second invitation and staggered back to the bike, revved it up, and rode fast and hard down into the valley.

CHAPTER TWENTY-SIX

Chapter

Arthur and Gianna stood outside of the corridor facing the door to the Beasts cell. The welds had mostly been cut through leaving the door itself hanging now by only two bars of metal on either side. "I'm ready if you are" Arthur tensed and held his side arm ready. It held a full charge and the safety was off. Gianna nodded and brought the cutter up, slicing through the first bar. The door sagged a little to one side. Arthur brought the gun up and aimed it at the center of the opening. Gianna gave him a look and cut through the second bar. The door crashed to the deck, teetered a moment, then fell outward into the corridor. Arthur and Gianna both took a step back. "Come out slowly and with your hands where we can see them" Arthur commanded. "Hello Mr Bell, Miss Pool, a pleasure to see you..." The Beast was interrupted by Gianna darting in, grabbing him by the arms and pinning him against the wall. Before he could catch his breath Arthur stepped in and snapped a dull black collar around his neck. The click of the mechanical clasp was followed by a series of tones and then a small light came on, green at first then red. Gianna let go of the Beast and they both stepped back. Arthur brought the gun up again and Gianna scooped the plasma cutter off of the floor. The Beasts hands rose to the collar that Arthur had made and felt around it. "Well made" he said "Your work I assume Arthur?" there was no visible latch or controls other than the small light and the Beast could not feel a seam or keyhole. Arthur held up a small hand-held control. "One suspicious move, one breath I don't like and you and your head part company in a very dramatic fashion." The Beast nodded a little stiffly "A bit draconian for you Arthur" he said then "This was not part of the deal." Arthur shrugged, his thumb over the button. "If you try to cut through the collar or if it does not receive a safety command every so often it will also go off." Arthur clipped the control box to his belt. "So stay close, stay smart, and maybe you will stay in one piece."

They lead the Beast down to the cargo bay. “I liked the old ship better” he said looking around “this one just feels so... grimy.” Gianna handed him a climbing harness “Here, put this on.” The Beast obediently strapped the rig around his body. Gianna clipped a line from a winch mounted on one wall to the back of the harness. “Time to go” she said and headed towards the bridge. Arthur climbed up into the bot and began strapping himself in as he gave the Beast a briefing. “We found an area the Lo-bots seem to be actively patrolling” he said, tossing a small pack to the Beast. “We will lower you in and then get to an altitude where we can keep an eye on you and still make it down to spring the trap.” The Beast looked inside the pack. It contained a flask of water, some ships ration bars, and a crude pistol. He looked up at Arthur with an eyebrow raised. “Before you get any ideas” Arthur warned “My heart stops you go boom, it’s so you can take care of any extra lo-bots that might cause problems before I get there. The beast nodded and added the pack to his harness “thank you for that kindness Arthur” he said and found a crate to sit on. The ship began to shudder as it lifted off. “All drones are away to raise some dirt” Giannas voice spoke in Arthurs ear. “ETA to the drop point in fifteen, hold on.” The ship lurched forward pushing Arthur back into the bots cockpit. The Beast nearly fell off the crate but managed to ride the acceleration out. “Ouch” said the Beast, no Inertial compensators?” Arthur ignored him and connected Bob to the ships network. They were flying low and fast and everything seemed to be holding together. He ran a set of diagnostic tests against all the more suspect systems but nothing seemed to be getting worse. To kill time he ran Bobs basic diagnostics as well to make sure the bot was properly compensating for the uneven weight of the added systems. He ran through a few motion tests, almost like stretching exercises and found that the right arm was

missing a little range of motion due to the tank and pumps mounted there. He recalibrated for the new maximums so he wouldn't accidentally tear anything off. "In final approach" Gianna announced. Arthur leaned out of the cockpit "You're on!"

The Albatross came in low and hovered over a rocky stretch of ground near the entrance to a deep canyon. Several lo-bots had been spotted in this area and they suspected that they may have a base or vehicle hidden nearby. Without setting down the cargo ramp half opened and the Beast stepped out into open air. He dangled at the end of the line for a moment and then slowly lowered to the ground. He fought to keep his footing under the severe downwash of the ship. He went to one knee and reached around to unhook the line from his back. When the clasp hung free the line wound back up into the ship which lifted off into the sky. The severe wind reduced then was calm. The Beast waited until the dust began to settle then pulled the pistol from his pack. He also pulled out the flask of water and took a swallow, splashing his face with some of the remaining water and wiping some of the grit away. He looked around and shrugged. He climbed up on top of a low rock, cupped his hands to his face, and shouted "Hello, is anyone there?" For a moment there was no answer at all, then he heard movement in the direction of the canyon. He shielded his eyes from the sun and could see a figure staggering between the rocks. He shouted again "Hi there!" and it stopped, looked in his direction and began half jogging towards him. Another joined it, and another. "Well, so far so good." He jumped from the rock and ran in the opposite direction, leading them to more open ground. He whooped and howled as he went so they would be unlikely to lose him. When the rocks began to thin out he turned. There were about ten of them in pursuit. The primitive gun he had held six shots. The Beast raised the gun and fired. There was a blast of

noise and one of the lo-bots keeled over backwards like it had walked face first into something. That left five shots and nine targets. And a need to keep one alive. He fired twice more and then there were seven charging at him. Three more times and then there were four left. The Beast braced himself as they rushed at him.

As the first of them reached him the Beast lashed out with the butt of the gun, striking it at the bridge of the nose. There was a crunch and a spurt of blood and the now blinded lo-bot staggered forward. He spun to one side and gave it a kick, knocking it into the second lo-bot. They fell against a rock and tumbled, the blind one entangling the other. The Beast flung the empty pistol at the third catching it in the forehead. The crack of impact was loud and almost certainly fractured the skull. The lo-bot moaned and wiped at the blood dripping down into its eyes. The Beast bound away from the intact fourth, the final lo-bot. The others fought to get to their feet as he darted around a rock and then cut to one side. “Come on boys” he laughed “you can do better than that!” With the lo-bot in pursuit he ran towards even more clear ground. If the plan was working then the ship would be on its way now. He cleared the rocks and spun, lashing out with a low kick sending the lo-bot sprawling but unharmed. The others were close behind. The Beast charged at them, grabbing one of the grasping arms and twisting hard, breaking the limb and smashing the lo-bot into the one who’s nose had been shattered. They went down in another heap of flailing limbs and he jumped over them, punching twice in rapid succession, knocking the breath out of the lo-bot sporting a head wound. As it doubled over trying to recover he grasped its head and violently yanked. The lo-bots neck snapped and it crumpled to the ground. The one he had tripped was now on its feet so he turned and ran again, out of the rocks and nearly into the arms of another twenty lo-bots.

“Oh shit!” The Beast skid to a halt. The lo-bots surged forward. He stopped himself from even trying to calculate the odds and just began lashing out at anything that came near. Punches, kicks, an elbow or a knee, he fought the sudden sea of grasping limbs. About the time he started to entertain the thought that he might not be walking away from this fight the air became filled with the massive roar of engines and a blast of choking dust. Something heavy hit the ground nearby and then lo-bots were being pulled off of him and flung away with enough force to smash bone. Arthur picked one that didn't seem damaged yet and pointed the bots arm at it. The nozzle mounted on the wrist began to spray the struggling figure with super cooled anti freeze fluid siphoned from the Albatross. It writhed and struggled and then grew still. The Beast leapt to his feet and went on the attack. Breaking necks and spines and dispatching the few remaining lo-bots not smashed by Arthurs bot. A few moments later and the Albatross was setting down. Arthur scooped up the flash frozen lo-bot and leapt into the cargo ramp as it opened. The Beast looked around the field of fallen bodies before walking towards the ship. “Not a bad day at all.”

CHAPTER TWENTY-SEVEN

Chapter

Jason rushed through the landship looking for any sort of sign as to where either the bridge or the engineering section would be. The place was a complete shambles, worse than the Albatross had been when they had first obtained it. “Hey!” he was shouting at anyone who seemed to take note of him. “We is gonna be attack!” To those that demanded more information he was spinning a crude tale of attackers from the north east, a large group on their way. The details changed from telling to telling in the hope that some confusion would be sown. Jason jumped over an open hatch then stopped and peered down into it. It was a miracle that this thing moved. The environmental systems were entirely gone and the place stank at best and in many places was awash in toxic fumes venting from dying components. He tried to remember the schematics they had found of this model of land ship and wound his way deeper in. The cramped passageways were mostly abandoned this deep into the ship, anyone who did not have to be here was further out or outside where the air was better. He saw one smaller figure, so grimy it was impossible to determine age or gender. “Hey you!” he shouted and grabbed at the cringing thing. He felt bad but had to play the part and this was obviously someone that would be pretty subservient to someone in Jasons apparent position. “Where da tinkers?” he demanded. The man or woman stared at him in fear. Jason tried different slang “da noggins, where dey, ya stupids?” The cringing figure shook its head and pointed down a hatch with a ladder sticking out of it. Jason make to strike the poor thing with the back of his hand but let it pull away and run. He set his boot on the uncomfortably shaky ladder and climbed down.

The air stank even worse down below and Jason stopped and coughed for a moment before heading on down the corridor. At the end was a massive security door stuck halfway closed and beyond

was a cacophony of hammer blows, grinders throwing sprays of sparking debris, and angry shouts. The engineering bay was a long crowded chamber that ran partway through the core of the ship. Jason could make out the reactors on the far end as well as numerous banks of generators and battery arrays. Some functioning, some obviously and sometimes catastrophically shut down. A group of men dressed in cobbled together protective gear were trying to coax one bank of generators back into life. A bot about half the size of Bob was pulling individual generators out of their mountings and raider technicians were pulling panels loose, splicing cables to bypass damaged systems, and generally jury rigging the hell out of them to work, no matter the cost in safety. Jason watched for a moment until he identified the one in charge, then strode up to the group with an arrogant swagger. “Hey noggin!” he shouted, pointing at the head technician. The man turned to look at him and scowled. “Watchoo want?” Jason kept walking until they were close enough to simply yell instead of screaming to be heard above the noise. “We’s gonna attack” he said “Dey say you get da shields go!” The technician shook his head “Shields no go.” He started to turn away. Jason grabbed him and spun him back. “Dey say shields go or...” he pointed to another tech at random “or he da noggin!” he laid his hand on the hilt of the machette. The technician looked at him and his scowl deepened. He motioned to two of the others and stalked down the catwalk, Jason following. They went about halfway down the bay then climbed down a ladder to a rack of equipment. Jason recognised the four shield generators hooked up to the bank of generators and batteries. The whole system looked unused and dark. The lead tech shouted at his lackeys and they began tearing the system apart, trying to get power flowing. Jason looked around trying to figure out how to get one or more of them out of the ship.

He had just begun to form a rough plan when he heard someone shouting behind him. "You!" Jason hoped uselessly that the shout wasn't directed at him, but the heavy footsteps coming towards him and the repeated "Hey you!" left little doubt. He turned and faced a huge raider. The man easily had a foot on him and was dressed in armor and gear that showed he didn't spend a lot of time here in the depths of the ship. "Watcha say attack?" Jason planted his feet squarely and tried to look more confident than he felt. "We is attack!" he shouted back "da bunches from da norteast come fast!" The raider frowned at him. "What you here?" Jason was confused for a moment then guessed he meant why had he come down here instead of straight to an officer, or chief, or whatever cannibal middle management was called these days. "Dey say do da shields" he said, letting just a little of a submissive whine into his voice. "Come now" the raider growled and walked back to the ladder. "Come, we say to da boss." Jason took one quick look around to cement the layout of the engineering bay in his head and followed after.

They made much better time moving through the ship this time. For one thing Jason's host actually knew where they were going which helped a lot. Also helping them on their way was the fact that anyone they came across immediately ducked into a side corridor, flattened themselves against the wall, or just turned around and hurried back the way they came. Jason was beginning to think he was being lead by someone very important, very dangerous, or more likely both. As they climbed higher into the land ship Jason tried to memorize as many landmarks as he could as well as counting turns. In the quite inevitable event that he had to make it back down in a hurry he was hoping to be a lot less lost. Finally they approached another large security door. This one seemed in reasonably well condition and was closed tight. It was

also flanked by two guards holding rifles fixed with wickedly jagged bayonettes. They brought the rifles up when they had first approached then relaxed when they saw who was leading Jason. “Open up” he demanded and one of them placed a palm on the panel by the door. Jason was a bit surprised to see working biometrics considering the state of the rest of the ship, but with a hiss the door opened and they walked on to the bridge.

“Here da one boss” his tall guide or maybe captor announced. The bridge was spacious compared to the Albatross and was sparsely occupied. Jason guessed that a science or communications officer was probably not needed, and given that the ship was grounded a skeleton crew was more than sufficient. More than it was spacious it was also very clean and well maintained. This was even more surprising than the door had been. The command chair swiveled around and Jasons jaw dropped open. ‘Da boss’ was not a burly raider warlord covered in spikes and skulls. He was a small man dressed in a neatr and well maintained spacers jumpsuit. His hair was cut and his features were decidedly those of an off-worlder. Jason was so surprised that he almost didn’t notice when his machette was taken from him. “What is your name scout?” the boss said. Jason scrambled to remember an appropriate name. “I is da cutta boss.” “Cutter, of course” the boss said and nodded to his escort who stepped back by the door. “Tell me about the attack cutter.” Jason pointed off to the direction he hoped the distracting dust cloud would be, even this high up it would not be visible from the valley. “Da attack come fast” he said “Hunndreds of dem come.” The boss listened and then asking questions about the attacking force. Jason answered in as convoluted a way as he thought he could get away with, buying as much time as he could. The Boss seemed unconcerned and kept asking more and more detailed questions until finally he turned the chair towards the

direction Jason had indicated and sat quietly for a moment as if considering everything he had just heard.

“Well...” he finally said, turning back to Jason. “You are an impressive liar I will give you that.” Jason tensed and the boss raised a hand “Crusher, seize him and take off that silly helmet.” Jason made to leap out of the way but the big guy was fast. Almost the same time he heard his machete hit the ground he felt strong hands grabbing him from behind. He tried to turn with the attack, to slip out of the grasp, but it held firm and he was slammed against a railing. Crusher lived up to his name as he pressed the breath out of Jason. With one hand he grabbed the helmet and pulled hard. For a moment Jason was not entirely sure if the strap or his jaw would give out first, but thankfully it was the strap. “That is what I thought” Crusher grabbed Jason’s head and turned it towards the boss. “So... a bounty hunter? Or just a thief?” Over his shoulder Jason could see tiny figures coming over the rise of the valley and running at full speed down the slope. Hundreds of figures in a giant wave. Jason grinned at the Boss “Neither I’m afraid.” The sound of a machine gun opening fire caused the boss and the crusher to turn slightly to look in the direction Jason had indicated the attack was coming from. Of course there was nothing in that direction so they turned back to the other side. As Crusher did so Jason brought his elbow up sharply into his side and dropped to the ground. The unbalanced Crusher fell with him and with a loud clatter they both sprawled on the deck. Jason grabbed the plate on his thigh and tore it away revealing his side arm. “Fire!” shouted the boss and the few crewmen left on the bridge rushed to their stations. Jason pulled his gun free and fired point blank into Crusher’s chest. The huge man fell away and he sprang to his feet. The Boss was drawing a gun of his own, a brutal short barreled shotgun of some kind concealed in the chair. Jason fired

again and the gun was dropped. He spun away from the boss who was doubled over holding his injured arm. He fired into the gunners consoles and then into the navigation controls. “Now” he said to the cowering bridge crew. “Who’s hand do I need to cut off to get this door open?”

CHAPTER TWENTY-EIGHT

Chapter

Arthur walked on to the bridge drying his hands on a rag. “The Beast is back in his cell” he reported and crossed over to Gianna and laid his hands on her shoulders. She reached back and touched his hand. “And our army?” she asked. Arthur nodded grimly “On their way.” He had spent several hours working on the lo-bot as it thawed. He had been able to interface with the implants and break in to the control signal. He had put the lo-bot into a standby mode, disabled its self destruct orders, and then worked to decode the command signal and trace it to its source. The Beast had acted as his assistant and had turned out to be a surprisingly capable medic, able to work on the flesh side of things far better than Arthur would have been able to. The plan had been to locate the central AI and then figure out how to draw it out and make it attack the raiders. What they had found simultaneously made their plan much easier but made possibly everything else in the universe a little bit more scary. There was no AI. Which is to say there was no central controlling AI locked in its ship or base. Instead what Arthur found was that these lo-bots were linked to one another, a huge network of cyborg brains. The AI was running in that network. Where small groups were gathered the AI would be very simple, limited by the available processing power. In a large group it would be much more sophisticated. This meant that the AI could in fact split off parts of itself, and if those parts were able to convert enough people into node lo-bots it could essentially reproduce, independently acting lo-bot swarms.

Arthur and The Beast worked together to figure out a way to introduce their own commands into the control signal. The horror of what they were facing made them forget their own antagonistic relationship. Once they were able to inject simple commands they worked out a protocol that could build on that to override the AI network. They were not sure how long such a violation would last

but it could be used to great effect even if it was only very short term. Finally they built a prototype of a device that would flood the control channel with interference and contrary commands, a sort of data bomb similar to what Gianna had used on the AI in orbit. This would likely stun even large groups of the lo-bots for a while. Arthur set the maker to use some of the dwindling carbon block to build two copies of this device and then he made copies of the plans to distribute to the Tin Man and local miners enclave so they would have a weapon against the potentially spreading plague of lo-bots. Arthur then connected to the lo-bot network and began injecting commands. Suggestions really at first, then stronger directives once they were being acted on. All lo-bots in range of the cluster they had detected in the canyon were instructed to march on the land-ship. They were also set to broadcast these orders as they went, to gather as many lo-bots as they could. Once this was done he had returned the Beast to his cell, affixing the door so it was merely lockable and not sealed this time. Trusting in the Beasts explosive collar to keep him from doing anything dangerous.

Gianna lifted the Albatross back into the air and set their course for the valley where the raiders had made their base. Arthur strapped himself in to his station and helped guide the drones back as they came into range. “Holy shit” Gianna gasped. Arthur locked down the last drone and looked up. The main screen was full of writhing masses of bodies. The valley was under attack by thousands of lo-bots. “So many” he half whispered. The raiders were falling back to the land ship but for every bullet they had there seemed to be three lo-bots and they were being overrun. The land ship itself stood silently, there were raiders on top of it and hanging out of open hatches firing weapons at the lo-bots but the ships huge cannons stood still. “Jason must have... oh shit, Jason!”

Arthur looked at Gianna and she returned the look. “All we can do is wait for a signal.” They watched in silence as the lo-bots overran the salvage rigs and the last ring of cars and trucks. Raiders were falling under a wave of bodies and none of them were getting up again. “Can’t we...” Arthur began, but he did not know what it was he wanted to suggest. Landing would be suicide, even with the scramblers a mass this size would be very resistant and injecting new commands at this point would be almost impossible. “He’ll be OK” Gianna said. “He’s been in worse spots.” Arthur almost laughed “Has he?” Gianna sighed “No... not really.” They continued watching the carnage as the lo-bots began swarming up the side of the land ship.

The lo-bots were falling by the tens and twenties, but more just climbed over their fallen comrades and the raiders were forced to retreat into the ship or be pulled from their perches and dropped into the swarm below. Arthur and Gianna sat silently, sweeping the melee for any sign of Jason. Finally Arthur had had enough. “Fuck it” he unbuckled his harness and climbed out of the station “I’m going down in the bot!” He was two steps towards the door when Gianna cried out “Wait, look!” He turned to the screen where part of the front of the landship was opening. “Holy...” The lo-bots surged towards the open loading bay but were pushed back by a maintenance bot that leapt out into their midst. It stomped forward smashing lo-bots that took too long to recover from the surprise. It was dragging two large pieces of machinery, one with each gripper. “Is that what I think it is?” Arthur winced as the shield generator was swung in a wide arc, smashing through the lo-bots. The bot vaulted over the generator, grabbed it again, then repeated the action with what had to be the shielded fuel rod injector for a fusion plant. After four devastating swings the lo-bots smartened up and fell back, charging the bot from the side and rear. It reacted

by spinning in a circle, its burdens held out like huge pendulums. “Open the bay door!” Arthur shouted, already running from the room. Gianna nodded and began to fly the Albatross in low.

Arthur sprinted to the cargo bay and grabbed the satchel of lo-bot scramblers off of the crate by the maker. He slung it over his shoulder and pulled a pair of goggles over his eyes. The bay was full of wind and dust, the open ramp acting as a scoop. He fought forward against the gust and grabbing ahold of one of the hydraulic pistons holding the ramp open he hung out into open air. Down below he could make out the writhing mass of lo-bots and the struggling bot that was currently their center of attention. Jason's bot had gone down on one knee with lo-bots climbing and tearing at it. The generator and fuel component had been dropped and he was using both of the bots grippers to try to throw off the lo-bots, but there were just too many of them. Arthur took a scrambler out of the satchel and set it for a fifteen second delay. He then hit the activation switch and lobbed it as close as he could to where the bot was going under a tide of bodies. The reaction was spectacular. The lo-bots were immediately thrown into complete chaos, the jumbled commands and stimuli they were receiving made each one behave completely differently. Some attacked their neighbors, some tried to run in different directions, some just dropped into the foetal position. The effect was visible as a wave spreading out from where the scrambler hit, like a rock dropped in a pond.

Jason was quick to take advantage of the disruption. He threw off the lo-bots still clinging to the bot and grabbed his prizes. The Albatross came in so low the wash of the engines was sending lo-bots sprawling, then the ramp was touching dirt. Arthur watched carefully as Jason dragged the parts towards the ship. Some lo-bots

were already beginning to recover and each time one did its neighbors seemed quick to follow. “Ten seconds” Arthur moaned, they were recovering much faster than he had hoped, possibly because of the sheer number of them available to the AI. He drew his side arm and began firing at the most coherent looking lo-bots. This slowed the rate of recovery near the ramp, but not near Jason who was already under attack again. Arthur took out the second scrambler and held it ready in his hand. “Come one” he yelled “just ten more feet!” The bot smashed its way towards the ship, but the lo-bots were beginning to bog it down once again. There was a shower of sparks and a spray of hydraulic fluids as one of them managed to tear into one of the shoulder joints. Jason activated and threw the second scrambler and another wave of disorientation shuddered through the lo-bots. This time the recovery was even faster, but it bought Jason enough time to hurl the shield generator into the bay. Arthur flung himself to the floor as it crashed against Bob, and rolled out of the way as the new bot lurched onto the ramp. “Go go go!” he shouted hoping Gianna could hear his voice above the roar of the lo-bots. It seemed she could as the noise was immediately increased a hundredfold as it was joined by the ship blasting skyward.

Arthur braced himself against the bulkhead and began picking off lo-bots still clinging to Jason's bot, which was hanging halfway off of the ramp. Jason was straining to pull the bot in, but the weight of the injector dangling below the ship was too much for the bot's damaged shoulder and Arthur could see the arm starting to fail. He kicked off from the wall and slid down the ramp, grabbing the bot as he went. “Drop it!” he shouted “drop it or you are going with it!” Jason shook his head, shouting obscenities... but let go anyway. The fuel rod injector tumbled down into the lo-bots as he hauled the bot, himself, and Arthur into the ship.

CHAPTER TWENTY-NINE

Chapter

Arthur hung upside down by his knees. He was beginning to feel more than a little dizzy but it was the only way he could get to the shield generators main power board. He had a half dozen cables dangling past him and almost every single one had a different plug with a different adapter. He had been connecting them mostly by feel for the last half an hour and he thought he had them all right. “Ok” he said into his radio “bring up the power very slowly to five percent.” There was a click from down below him, then a hum that rose in pitch five times. Arthur closed his eyes and braced himself but nothing exploded. He opened his eyes and spoke into the radio again “Everything looks good down here, what are you seeing?” Giannas voice came through with a burst of static. “Five percent and holding, all reflectors are online and power draw is... a little high, but within tolerance.” “Oh thank fuck” Arthur swung up and pulled himself onto the catwalk. “Bring it up to fifteen percent.” Again the pitch rose. He swung over the side of the catwalk and dropped to the deck. “Still good, you?” The readouts on the side of the generator were mostly useless, a result of having been used as a giant club, but nothing was showing red. “Fifteen percent and holding, everything looks good!” “Ok, fuck it” he muttered to himself “do or die time.” Into the radio he said “Full power” and hid behind a support beam. The hum rose into a whine and back into a hum then faded into pitches he felt more than heard. Arthur counted to one hundred then peered out at the shield generator. Nothing exploded. “Status report” he requested. “One hundred percent” came the reply. “It’s sucking power like a son of a bitch, but the reactor is handling it!” “Great” he started picking up his tools “Shut her down, I think we are go.”

Back on the bridge Gianna met him with a hug that nearly cracked a rib. “Good job honey.” Arthur squeezed her back at a

more human level of pressure and kissed her. “So with one little detail to deal with we are good for launch.” “Yeah, about that problem...” Jason walked on the bridge. He had a grin that Arthur and Gianna had seen before, a grin that meant he was about to do something incredibly dangerous. “Uh oh” Arthur looked at Gianna who had an expression of worry that matched the one he felt on his own face. “I think I know where we can get more fuel.” Arthur crossed to the pilots seat and leaned on the console. “Um...” Arthur began, “Where?” Gianna finished for him. Jason leaned over the console and brought an image up on the screen. “No” Arthur said “no way!” Gianna nodded and added “That is possibly one of the worst ideas you have ever had.” The image was one of Giannas scans of the Kessler belt, one with the likely hiding place of the main AI. Jasons grin widened seeing the expressions on their faces.

“Why the hell can’t we just try to trade for some?” Arthur argued for the third time. “We have an extra bot now, even a small one would get us enough tritium to make it to the gate!” Jason shook his head “No time” he said “We need to get this news out and we need to get help here yesterday.” Gianna sat quietly, running the numbers as the two fought. They had gone over the same points over and over and Gianna figured she had nothing new to add. “Going orbital without enough fuel to break orbit is practically suicide!” Arthur banged his fist on the chair. “Besides, we don’t even know if we have enough to reach this hidden ship!” Gianna sent the trajectory data she was working on to the screen. “Actually we can” she said. Jason nodded “see?” he motioned at the screen “it’s fine.” Arthur glared at Gianna “You aren’t helping!” She shrugged. “We could make it and have a little power left to keep the shields up while we maneuvered in with reaction drives.” She closed the image. “Of course if the fuel isn’t there we

die.” Jason waved his hand. “A functioning warship will have several reactors, even if only one is functional there will be fuel.” Arthur rubbed his temples “and how do we get at it?” Jason waved his hand again “we improvise, something will present itself.” Arthur took a deep breath and locked eyes with Jason. “I want to log an official protest that this is a terrible and dangerous idea.” Jason nodded “noted and logged, now get ready to launch.”

After a thorough walkthrough of the ship making sure everything was secured, sealed, locked, and to some degree safe, all three sat at their stations. “Drone three away” Gianna had sent the drone to the Tin Man with all the information they had gathered on the new lo-bot AI network, how to interface with it, and the plans for the scramblers. They hoped it would help keep them safe until a full ranger mission could be dispatched to destroy this threat before it found a way off world. “Reactor online” Arthur began his checklist. “Engines one and two online, Shield generator online, compensators online.” Gianna took over. “Navigation online, beacon receivers ready, Flight path is clear and weather is acceptable.” Jason cracked his knuckles and took hold of the flight controls. “All systems check green... well yellow anyway” he grinned again “full power to engine cores.” Arthur disabled the limiters “check!” “Full thrust in five...” Jason set his feet into the stations pedals and began increasing power. “Four...” Arthur locked his eyes on the system reports, watching for any reasonable excuse to cancel the launch. “Three” Gianna closed her eyes and let her link to the ships computer take over, she could feel the atmospheric conditions around them and make minute adjustments to the flight path as needed. “Two...” The ship roared as the engines came to full life. For a moment the ship just sat shuddering in a storm of dust and debris, then the ground was a hundred feet below them and getting further fast. The compensators kicked in

and the roar reduced to a rumble, the sonic boom as they crossed the sound barrier was a muffled pop and then the shivering of the ship eased and smoothed out. Arthur looked up from his screen and saw the horizon outside the viewports. “Vectoring for low orbit” Jason looked over his shoulder at Arthur “see?” he said “piece of cake!”

They made a full orbit before they accelerated to lift the ship into the territory of the AI. Gianna maintained the ships course as Arthur and Jason tightened down a few systems that had fared less than perfectly during the launch. When they had finished their hurried repairs they returned to the bridge and strapped in for another burst of power. “Fuel rods are nearing full conversion” Arthur reported “Reactor shutting down in... ah there we go, we are on battery power now.” Outside the viewports the shields were a light show of sparks and flashes as debris collided and was vaporized. “Sir...” Gianna sounded concerned. “Jason looked back at her with a frown “Yes?” She opened her eyes and double checked on the terminal. “Beacon receivers are malfunctioning sir... I don’t have any navigation beacons online.” Arthur frowned. Almost all ship navigation was done by triangulating off of local navigation beacons and the major long range imperial beacons, without a functioning receiver determining their exact position was a difficult process. “Can you manually figure a course to the gate?” Jason turned back, concentrating on maneuvering the ship towards the debris cluster where their target, Arthur dearly hoped, was hidden. Gianna sighed and closed her eyes again “I’m on it sir.”

With the ship running on batteries and conventional generators Arthur ran through system by system turning off Anything that was less than critical. It was going to get uncomfortably cold very soon, but air should last longer than they would have maneuvering

capability... which was an uncomfortably short time. If this plan didn't work there was no making it out of orbit... and no making it back to Bleak. "Do or die" Arthur muttered to himself. Jason engaged the reaction thrusters and the hulks of several large vessels came into view. "Hello" a slightly artificial voice burst through their com system making them all jump. "Tight beam broadcast" Arthur said. "Lock in and trace it" Jason commanded, Arthur was already halfway there. "Coms open... now... Hello there" Jason said. "This is the ISV Bellerophon" the voice said. Jason held up a hand and Gianna nodded, searching their database for information on the vessel. "Hello Bellerophon, this is the IRV Albatross." There was a pause then "Have we met? I do not remember having met an Albatross... Captain Harrison, have we met the Albatross?" Arthur and Jason exchanged glances. "Captain Harrison seems to be indisposed" the Bellerophon sounded dissatisfied. "Are you here to play?" "Coms closed" Jason said "Anything Gianna?" she frowned slightly. "An early imperial battleship, not a lot of data." She pulled up a series of images "Only very rough diagrams, but it should have three reactors in this section." She highlighted the engineering section of the ship and the two backup reactors. "It's activating drones" Arthur warned "if it wants to play, it might play rough." Jason thought for a moment then said "Coms open... Yes Bellerophon, we would like to play, what games do you know? Coms closed." The voice began listing games. Some they were familiar with but many were entirely new to them. "Ok" Jason said "It's obsessed... what do we say to get us inside?" Arthur answered "Some sort of game that requires we be face to face... hmm..." Jason grinned that grin again. The Bellerophon finally finished its liturgy of game names. "Com open" said Jason. "Can you open your docking port Bellerophon?" There was a pause then the suspicious sounding reply "Why Albatross?" Grinning like a madman Jason said "We

would like to play Charades.”

CHAPTER THIRTY

Chapter

“That” said Arthur as they accelerated away from the Bellerophon “was very very weird.” (Yes, I know that was a cheap way to skip writing an entire chapter, but for this draft it’s going to have to do. I have plenty of words and it’s time to bring this plot home to roost, declare my win, and have a whiskey and a nap. Deal for now, the whole ending will be reworked later.) Under full power again Jason brought the Albatross up out of the Bellerophons playing field and into less debris ridden space. “Anything Gianna?” She shook her head “Nothing sir... feeding the manual course to you it shouldn’t be more than... a couple hundred miles off?”

A burst of static blasted from the speakers. “What the fuck...” Arthurs hands flew over the controls. “Distress beacon, but the transmission is pretty garbled.” He began fighting to filter out the noise. “Hold on, I almost...” there was a loud discordant squeal and then “the gate. kssshhhht can’t get kshhhshhhht get shhhht shhhht shit, here kshhht kshhht there is no kshhhhhh kshhhhh. [ranger motto] Full speed kshhhh kshhhhhhhh kshhhht the gate!” Jason sat bolt upright in his seat. Gianna and Arthur looked at one another in surprise. “Was that...” “Shh!” Gianna hushed Arthur. “Repeat kshhhhh To kshh imperial “hshhhht kshhht can still kshhhht this shht kshhhht Marshal kshhhh of shht kshhhhh ranger kshhhh kshhhht The capitol kshhh kshhhht the network kshh kshhhht sshhh orders received.” Jason leaned forward, listening intently. “Can you...” Arthur nodded without answering, trying to clear up the signal. “from ranger kshhhht are kshhhhh. We are closing the kshhh. If they can’t get through they can’t get kshhhh Oh shit, here they come there kshh kshhh more time. Full speed ahead kshhhhhhhht we’re ramming the gate!” Arthur smacked the side of the terminal hard and returned to the controls. “I almost have it, it’s a repeating pattern and...” he trailed off, concentrating

on filtering the audio “Got it!” They listened as the full message looped, their faces turning hard. “Repeat message. To any imperial vessels who can still receive, this is Captain Marshal Collins of the imperial ranger vessel Falling Star. The capitol has fallen, the network is compromised. The final orders received from ranger command are suspect. We are closing the gate. If they can’t get through they can’t get the macguffin. Oh shit, here they come, there is no more time. Full speed ahead Lieutenant, we’re ramming the gate! Repeat message. To any imperial vessels who can still receive, this is Captain Marshal Collins of the imperial ranger vessel Falling Star...” Jason pounded his fist against the pilots console. “Shut it off!” Arthur cut the feed and they flew in silence for several minutes.

“The Falling Star” Jason said quietly. They had all known Captain Collins and he was a capable ranger with a good crew and a ship every bit the match for the Minerva. “How soon until we have visual?” he asked. Gianna switched the main screen back to the forward view from the ship. At first it mimicked what they could see out of the viewports but as she magnified the video they could make out a small dark shape. “We should be close enough to identify the structure in...” she fell quiet as the dark shape grew larger. They all stayed silent as the structure of the stargate became recognisable. It was entirely dark, no running lights, no lit viewports, no guiding beacons. They came closer still and could make out the broken ring of the gate and the shattered remains of the control station. Drifting around the ruined gate were the remains of an Imperial Ranger Starship. “Diagnostics complete” Gianna said in a small voice. “The receiver is working perfectly Jason, there are no beacons... local or the master beacons.” They all knew what that meant. Without beacons there was no star travel, and without star travel there was no empire. They both

looked at Jason for some guidance. He sat silently staring at the wreckage for a long time, then took a deep breath and through clenched teeth gave the order. “Set course for Bleak... let’s find home”