

Vasquez Orbital Salvage and Satellite Repair

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(8,200 words)

Thirteen hours in the jar would be enough to break the will of any man. The jar was small for a space habitat, measuring somewhere between a coffin and an elevator. It wasn't as comfortable as a coffin, or as entertaining as an elevator. Outside was the eager embrace of vacuum. Inside, there wasn't much more than that.

Thirteen hours in the jar would have had the most hard-bitten space captain begging to give up the self-destruct codes to his ship. But for Emilio Vasquez the jar wasn't a torture imposed by some brutal interrogators. It was his job.

Vasquez made most of his money by scooping up junk in orbit around Venus in a wire mesh net attached to the front end of his orbiter, the Chomper. On most planets you

could make a bit of money doing this, but Venus was young, barely developed, and the junk that orbited this planet was pretty meager. Fixing satellites, on the other hand, could be very profitable, and Vasquez could fix a satellite. So he had this new business idea. He would set the Chomper on an orbit around the planet, hoovering up junk as usual, with no one on board. Then Vasquez would go extravehicular in this military surplus repair module, the jar, and fix satellites until the Chomper came back around. It was a sweet idea. Only one problem: the jar transformed itself from a vaguely unpleasant and uninteresting can of air into a hellish prison of the mind sometime around hour seven. Had Vasquez known this, he never would have bought the damned thing. But he was in hock now, so he had to stick with it.

He had a contract to repair the guidance system on a particle beam generator, and he was rushing to finish in time to satisfy a number of time limits that were about to collapse in on him. First, he had to finish in time to rendezvous with the Chomper. The rendezvous was two hours away, and he couldn't be late or the jar would run out of battery power waiting for the ship to swing around on the next fifteen hour orbit.

The second time limit was somebody else's screw up, but that didn't make it any less real or any less of a pain in the ass for Vasquez. The particle beam generator, used to speed up or slow down big ore haulers, was off course and swinging dangerously close to the orbit of the Ticonderoga, the warship that policed Venus orbit. If it got too close the trigger happy rent-a-cops on the Tike would freak out and might even open fire. Then Vasquez would lose the satellite repair contract and probably his whole business.

The third time limit was just Vasquez's personal hang-up. He was working about five meters from the unshielded isotope battery that powered the particle beam

generator's guidance system. He was watching the dosimeter clipped to the front of his shirt pretty carefully. He had clicked over five rems since he started, which wasn't too bad for an acute exposure. He might lose a little hair the next couple of days, or find some blood in his stool, if he cared to look for it. He didn't think too much about the chronic dose. He already had in excess of 200 rems on it, which was pretty normal for a spacer. Good for a significant cancer risk, almost a guarantee that any child he fathered would have some serious mutation, but he'd gathered that dose over years and he'd had time to get used to the idea. He knew he'd be feeling it in the morning if he caught more than ten rems in one shot, so that was another good reason to hurry it up.

Vasquez paused the waldo in the process of resetting an unseated chip. He pulled his fingers out of the thimbles one by one, then twisted his wrist out of the bracelet, and then wrenched his elbow out of the cup. Finally, he used his free hand to scratch madly at his crotch. The vacuum diaper was riding up on him again. He'd be glad to get back to the relative luxury of the Chomper. He readjusted the nylon harness that kept him from floating around inside the jar, then reversed the process to get his arm back into the waldo rig.

Like most military surplus items, the jar was not exactly right for this job. It had been made to fit some other purpose and Vasquez was still working on refitting it for his own needs. The engineers who'd designed the thing had given it just four hours of life support, reasoning that not even an idiot would agree to more than four hours in such a confined space. When Vasquez had bought it, he'd immediately refitted the life support for twenty-four hours, to suit his own needs. He didn't care what the engineers thought. He needed something that would keep him alive during an entire orbit, at every level,

even up in the high country. That way he could set the Chomper on a rich vein of junk while he fixed a satellite in a cleared orbit. He had it all figured out, except for the psychological factor. It turned out the engineers were right on that calculation.

The tool kit on the outside of the jar had items he never thought he'd use, and lacked tools he needed. It had several sets of waldo hands, ranging in size from the delicate little centimeter wide pin hands for electronics work to the big, clumsy, and mostly useless meter wide meat hooks. The chemical engines had too much power, and there were way too many of the small compressed gas thrusters for him to keep track of. He knew what the fiberoptic scope was for, and the laser welding torch, but the green oval screen with the row of useless buttons on the inside wall was still a mystery. It would be a while before he had the jar set up just the way he wanted it.

It looked like he was finished. He powered up the guidance system and watched the start-up procedure. The self diagnostic showed green. The guidance system was back online and the satellite was already moving away from him, parking itself in its own orbit. Almost as if it knew the bastards on the Ticonderoga were notoriously jealous guardians of their orbital space. Vasquez got ready to boost the jar back into the path of the Chomper so it could snag him as it swept by. Then it was a hot shower, flip on the news and see how the commodities market was doing, and sort through some junk. Better by a damned sight than sweating away in the jar.

Before hitting the engines, Vasquez looked out the windows out of habit, making sure he wasn't boosting into the path of some projectile. The jar didn't have radar. Unless that was what that green screen was for. Up ahead was the bright spark of the Tike, coming on fast in opposing orbit. Down planet was the particle beam, still finding

its own real estate. The Chomper was too small to see, even though it was closer than the Ticonderoga. And up in the high country...

Something. Vasquez wasn't sure, but he thought he saw Betelgeuse occluded for more than a second. Yes, there it was. It occluded the stars in the belt of Orion, Anilam first, then Mintaka and Alnitak at the same time. The stars stayed dark for well over a second, then all three reappeared at the same time. Something big, or close, or both, and moving fast. There was nothing in the high country that big.

It wasn't an ore hauler. They kept a pretty regular schedule. The resupply ship was a week out, he was quite sure of that. Nobody on Venus missed the arrival of the resupply ship. And it couldn't be a tourist. Venus was a pit. There was no reason anyone voluntarily came here. Vasquez was curious. He flipped on his radio to call traffic control on the space station.

"Unidentified vessel, this is Venus security aboard the Ticonderoga, please transmit your code and alter course." So, apparently the boys on the Tike had caught sight of the bogie and they sounded like they were shitting in their pants. "Unidentified vessel, you must alter course... Unidentified vessel, your current heading is in violation of Venus orbital priorities, alter course for high parking orbit and identify at once."

The voice on the radio changed. Someone had gotten the boss. "Unidentified vessel, this is Venus security. You are encroaching on protected Venus space. Alter course or prepare to be fired upon."

What happened next made Vasquez jerk back so he missed seeing it directly. A burst of static so intense it sounded like an explosion came over the radio. A burst of light streamed through the window. He pulled himself back to the window in time to see

the glowing embers of what was left of the Ticonderoga spreading out in an asymmetrical cloud.

“Unidentified vessel, you dirty bastard,” Vasquez whispered.

For the next few hours, Vasquez knew only stark terror. The unidentified never spoke over the radio, but Vasquez heard the crews of the ore haulers jabbering away until, one by one, they were blasted just like the Ticonderoga had been. He watched on in helpless horror as the space station, with a couple of hundred men, women, and even a few children, was blown up.

Then it was Chomper’s turn. The little orbiter was running quiet, not jabbering away on the radio, not firing any boosters, just drifting in orbit and catching the occasional piece of garbage in its net. But it was sending out a transponder signal, and it was burning a little plutonium in its reactor. So the unidentified lit it up. Vasquez never saw the shot, whether it was a missile or an energy beam or just a depleted uranium slug. Whatever it was, it made short work of Chomper. Just a little static burp and a dim red cloud of debris, and that was the end.

Vasquez finally saw the enemy when it passed between him and the planet. It was a warship, of course. Much newer than the decommissioned Ticonderoga, wedge shaped, and dead black, to better radiate heat. And it moved like nothing he’d ever seen. It reversed directions so fast that everyone on board must have been in acceleration tanks filled with silica gel. The enemy ship went into a power dive and swung through two gut wrenching hyperbolic orbits, looking for more targets. It must be packing one of those

magneto-warp engines he'd heard about. No mere reaction drive could move a ship like that.

Next, they went after the particle beam generators, which of course could be used as weapons. That wasn't what they were designed for, but someone like Vasquez could have pointed one of them at the invader and let go with a barrage. He might even scratch the paint. He hadn't thought it was worth trying, but apparently the attacker was worried enough about the possibility to blow up all four of the generators.

As it turned out, it was a good thing that he was clear of the particle beam, because whatever they threw at it made for a hell of a light show. Vasquez felt a tingle that brought tears to his eyes, then a wave of heat as the temperature regulators overloaded, and finally his ears popped as the jar was compressed in the shock wave.

He hung in the center of the jar, trying to catch his breath and blinking the spots out of his eyes. He was alive. The particle beam generator had been over a kilometer away when it went off. He didn't see what had hit it any more than he had seen the weapon that had destroyed the Ticonderoga or the Chomper. But he was sure that whatever it was, it was swinging around to draw a bead on the jar next. He couldn't run, or hide, or fight back. He was still strapped into the harness of the waldo rig, so he couldn't even kiss his own ass goodbye. So he just waited.

And waited for ten minutes more. He heard the static burst of the explosions as the other three particle beam generators went off, then the enemy ship took up a position over the north pole of Venus and just sat there. Not orbiting, not moving. Just using its fancy new engines to hover, right over Cupid, the biggest mining base.

They hadn't seen the jar. It wasn't surprising, the jar was relatively small and didn't put out much radiation in any wavelength. If they had seen him, they would have opened fire, certainly. They'd killed almost everything else in orbit, everything that posed a threat. And, laughable as it was, Vasquez in his little jar with the little hydraulic arms could be considered a threat.

So they had spared the jar as an oversight and had gone right to attacking the planet. Vasquez could see these weapons. Bright sparks fell from the enemy ship towards the yellow cloud cover. Then he saw something he'd never seen before. Something he never thought he would see. He looked down on the unveiled face of Venus herself. Whatever those weapons had been, they were powerful enough to roll back the dense cloud cover over the pole, to expose the surface that hadn't seen direct sunlight in millions of years.

But powerful enough to crack Cupid? Probably not. The weapons would destroy everything on the surface, to be sure. Any miner unlucky enough to be out and about would surely have been crushed by the shock wave, which would carry a lot of force in 90 bars of CO₂. But Cupid was buried underground, under tons of volcanic rock packed with heavy metals. It was the perfect bomb shelter. The mining base was already shielded against blast furnace heat, crushing pressure, acid, electrical storms and earthquakes. What weapon could damage them?

The answer was obvious as Vasquez waited for the barrage to continue. The weapon was time. The shock wave had destroyed the power receiving stations, which had to be up on the surface to catch energy from the power satellites. Without them, Cupid would no longer have the energy to pump heat out of the habitat. As their internal

power supplies ran down, they would cook in there, and this little drama would slowly come to an end. Or they might opt for the escape pods and get picked off one by one as they launched themselves into orbit. Either way, Emilio Vasquez would be the only survivor of the attack. He'd have that distinction for just six more hours, because that was when his own batteries would quit, then shortly after that the air scrubber, then Vasquez himself.

If he lasted that long, that was. In order to make it to his date with asphyxiation he first had to orbit through the debris cloud of the Ticonderoga. When the attack had started, the jar and the Tike were in the same opposing orbit. Most of the debris followed the same path as the ship had been headed, and Vasquez dared not fire up his main engines to move the jar for fear of attracting attention. The cloud would be full of all sorts of nasty twisted metal, not to mention the remains of the rent-a-cops and a big chunk of fissionable material from the reactor. He didn't want to add a dangerous radiation exposure to the perils he already faced. Of course, he had probably already caught a few extra rems during the attack. Then he remembered the tingling sensation he had felt when the particle beam generator went off.

Vasquez grabbed the dosimeter clipped to the front of his shirt and brought it up in his shaking hand. He remembered getting the dosimeter on the first day he'd gone to work for his father's salvage operation in Martian orbit. They'd given him a lecture about the different kinds of ionizing radiation, and the acute and chronic effects of exposure. He'd only half listened at the time, but since then he'd picked up what he needed to know.

He suddenly remembered the day when he had threatened to quit his father's business, join the military, work on the amazing space ships he'd only read about. He remembered his father laughing at him, pointing to the badge.

"You think the military's going to take you with an exposure like that? You're dreaming, kid. They don't want to get stuck with the medical bills, getting you a new set of stem cells."

He'd been right, of course. Ben Vasquez wasn't always right, but he was not wrong so often that you'd notice it. They'd said he was crazy to buy the salvage rights to Venus, long before there was any salvage orbiting Venus. That the claim had become worth something only after Ben Vasquez was dead was only affirmation of his foresight. He had made a gamble that had payed off for his son, and he'd managed to control Emilio's destiny through his inheritance.

Emilio Vasquez slowly unclenched his fist and looked at the readout on the dosimeter. This morning it had read 213,452 mrem. This afternoon, the badge read 999,999 mrem. It was off scale. He'd received at least 787 rem in a single burst.

Probably a lethal dose. Without medical treatment, he might live twenty-four hours, not much longer. With that hit of radiation, every cell in his body would commit suicide, one by one, in an effort to save the whole body from the possibility of a cancerous mutation. The good news was there was a cure for acute radiation exposure. The bad news was that the jar's first aid kit contained only adhesive tape and a mild analgesic.

Vasquez felt the panic rise in him. A lethal dose. His mind simply could not wrap itself around this piece of information. He looked at his watch to guess how long he

had. Then he remembered that it was time to enter the debris cloud of the Ticonderoga. The thought of tons of twisted metal hurtling toward him had the strange effect of clearing his mind, calming him down. This was a problem he could deal with. And then he had the battery power to worry about. The two problems together took his mind off the numbers on his badge. Time enough to worry about that later.

Floating through the debris field was like entering a three dimensional graveyard. The security forces that had manned the Ticonderoga were everywhere, in various states of dismemberment. He didn't have any friends on the Ticonderoga, and a few of these corpses belonged to people he would have called enemies. They were officious pricks who'd obstructed him in the course of running his honest business. But he'd never have wished this end on them.

Around them was some great junk. The next salvage operation around this planet was going to find a gold mine in this orbit. A junk man's wet dream. Vasquez had his eye out for something in particular, though. He was in the waldo rig, scanning the cloud through the scope with the arms ready to reach out and push aside anything dangerous, or grab anything useful. The jar needed lithium batteries to extend the lifetime of the air scrubbers. The Ticonderoga would have been carrying lots of them. They'd be found on any equipment that needed an uninterruptible power supply. Vital computers, failsafes for the reactor, things like that.

A winking green light caught his eye. Something in this cloud had power. He gave the foot pedal a nudge, releasing just a little bit of compressed gas to push him closer, making a snap decision with no time to guess what it was. The jar drifted over to the winking light. With a hair trigger reflex born of desperation, Vasquez made the grab.

The feedback mechanism told him he had something. He looked through the scope at the thing in his surrogate hands.

It was a pretty complex chunk of electronics. He rolled it over and found a charge meter. The lithium batteries were still pretty full. Whatever was attached to the battery, it wasn't using much juice. By the minor miracle of empty space and chance, he'd hit the one thing he wanted and missed everything else.

On the far side of the cloud, safe for now, Vasquez looked over his prize more carefully. He thought he might be able to pull the batteries out and simply swap them for his own as they ran out. But another possibility presented itself. There was a connector on one side of the piece of debris he held that had a distinctive shape. He knew the jar had the opposite connector on the end he thought of as the bottom. It might work to just plug these two connectors together, and then he wouldn't have to worry about losing power while he fumbled around with batteries. But then again, he had no idea what that connector was really for.

He decided to try it. If it started doing something funky, he'd be ready to pull out the plug right away. The arms just reached the bottom of the jar. He'd been right about the plug, it fit perfectly. Next, he checked the power levels on the life support module. No change. The connector may fit perfectly, but it didn't feed any battery power to the jar. He got ready to pull it back out again, when he noticed the green screen. Lines of code were marching down the screen, some kind of boot up sequence.

"Now what the fuck is this?" He reached for the screen to adjust the enigmatic controls lined up beneath it.

“Sir,” a voice snapped from the speakers. “Strategic advisory system theta five prime, reporting for duty, sir.”

“Excuse me?” Vasquez said. The voice had come out of a speaker just above the green screen.

“Sir,” the voice said again. “Strategic advisory system theta...”

“Yeah, yeah, I got that.” Vasquez tried to read the lines of code on the screen and understood nothing. “Where are you? I mean, who is this?”

“Sir, at this time I appear to be attached to a standard data-com port on a type seven single occupancy module in Venus orbit. And begging your pardon, sir, but I am not a who, but more precisely a what.”

“You’re a computer.”

“That is correct, sir.”

“Will you stop saying ‘sir’? You’re making me nervous.”

“I am unable to comply with that order, sir.”

“Whatever, dude. I don’t have the battery power for a strategic advisory computer, right now, so I’m sorry but you’re going to have to go back into the junk pile, my man.”

“Sir, this unit has a self contained power supply. I am available for consultation during military operations.”

Vasquez had to laugh. “Military operations? Do you have any idea what just happened?”

“Please specify what time frame, sir.”

“Five, five and a half hours ago. Do you know what happened then?”

“Five hours, twenty two minutes ago, I went on standby mode, sir.”

“And before that?”

“My memory does not include times previous to that, sir.”

“Well, let me catch you up, then. You were a part of a spaceship called the Ticonderoga, which was patrolling the planet Venus. Then you got attacked and the Ticonderoga got blown to bits. You weren’t much help during that military operation, were you?”

“It is likely that the crew of the Ticonderoga would consult me during a battle, but I have no specific knowledge of these events. Sir, if I may ask, are you a survivor of the Ticonderoga crew?”

“No, I’m from the Chomper. It got blown up, too.”

“Then, may I ask for my own internal protocols, what is your name, rank, and serial number, sir?”

Vasquez laughed. “My name is Emilio Vasquez, my rank is supreme commander of the space forces of the planet Venus, and my number is 999,999.”

“I’m sorry, sir, but my protocols do not accept that rank or that serial number.”

“Oh, shut up,” Vasquez said. The speaker fell silent, but the lines of code kept marching off the top of the screen.

Well, that was a waste of time. Vasquez started to work his way back into the rig to pull the device out of its socket and begin to dismantle it, but he stopped.

“Hey, strategic dude, you still there?”

“Yes, sir,” the computer snapped.

“Do you by any chance know anything about radiation poisoning?”

“I have limited database resources that include the biological effects of various weapons systems on human crew members.”

“Well, I just took a hit of about 800 rems. Looks like gamma radiation. Can you tell me anything about that?”

“That is a lethal dose, sir.”

“Yeah, genius, I know that. What I’m wondering is, what’s the medical treatment for a dose like that?”

“I do not have access to medical treatment protocols, sir. I suggest you refer this question to a medical doctor, or a medical advisory system, version seven or later.”

“All right, all right, that’s enough. I’m unplugging you, now. I need the batteries more than I need your advice.”

“Sir, my database pertaining to the current strategic situation is incomplete. My advice would be much more useful if I were given up to date information. May I suggest you connect this module with your flight data computer.”

“I don’t have a flight data computer, man. This is just a jar with arms.”

“Sir, the type seven single occupancy module is equipped with a flight data computer. It is a rectangular unit located approximately in the middle of the inside surface of the cylinder. The visible components consist of an oval screen with a green tint, a series of buttons ...”

“Yeah, I know what that is. Now, what did you want me to do? Hook you up with it?”

“Yes sir. If you would press the button labeled OPCOM, my database will be updated automatically.”

“What the hell? Here you go, man.”

It didn't take long for the computers to do their thing. Within seconds the advisor was back. “Sir, medical treatment may be available on the enemy spaceship.”

“Yeah, how am I supposed to get that treatment, smart guy?”

“Sir, the enemy spaceship that attacked this planet is of a type unknown to me. Please update the specifications file to the latest release and resubmit your query.”

“I don't have any latest release, you moron.”

“Update the specifications file to the latest release and resubmit your query.”

“I'll resubmit you to the cloud of junk where I found you, you piece of crap.”

Vasquez stabbed at the buttons underneath the screen, all labeled with incomprehensible military acronyms. Not even the lines of code showed up on the screen. He stared at the buttons, trying to make sense of them. The only one he recognized was RESET. A button of last resort. He tried a few of the others without result, then reset the computer.

“Sir, strategic advisory system theta five prime, reporting for duty, sir.”

“Let's try this again, theta five prime. What's the last thing you remember?”

“Sir, I've been on standby mode for twelve seconds, sir. I have no data pertaining to events prior to that time, sir.”

“You piece of crap,” Vasquez shouted, slamming the palm of his hand against the side of the flight computer.

The computer said nothing. Vasquez looked out of his windows, first one, then the second, and finally the last, before he found the enemy ship. It was just slipping away behind the planet. He wouldn't see it again for another five or six hours, as long as it didn't move.

“Strategic advisor? Talk to me, daddy.”

“Sir, strategic advisory system theta five prime, reporting for duty, sir.”

“That’s great, buddy. Let’s say I’ve got an enemy spaceship hovering over the north pole of the planet Venus, and I’m sitting in a jar, sorry, a type seven single occupancy module, that’s about to run out of battery power, and I’ve got a lethal dose of rems besides. Now, how might I go about getting my sorry ass out of this situation? I’d really like to hear your advice on this matter, theta five prime. I mean, your advice served the Tike so well, I may as well take advantage of it, don’t you think?”

“Sir, may I assume that the passive radar information stored in your flight data computer correctly describes the situation?”

“Oh, you can see the flight computer now? Excellent. It knows more about the situation than I do.”

“Sir, your module has engine power sufficient to drop it into an orbit that will intersect the last known location of the enemy vehicle in four hours. Approaching the enemy in stealth mode will allow you to attach the module to the outside of the hull, where you will be able to cut your way inside. After neutralizing the crew, you will then be able to make use of the automated medical facilities on board to treat your radiation poisoning.”

Vasquez laughed, long and hard. He laughed so hard tears beaded up in his eyes and blinded him until he wiped them away with his sleeve. The laughing fit became a coughing fit. When he was finished, a mist of blood and phlegm hung in the air. The air handlers chugged a little when they tried to clear out the atmosphere. The radiation was starting to have its effect.

“That’s your advice?” Vasquez asked when he had recovered. “You are one insane little computer, you know that? That attack must have scrambled your brains. Neutralize... What a riot.”

The computer said nothing.

“By the way, what is stealth mode?”

“Sir, the module you are in is equipped with radar jamming hardware, and is shielded against passive detection. Stealth mode allows you to approach and even contact enemy spaceships without being seen.”

“No kidding? Why the hell would a repair module have that?”

“Sir, the type seven single occupancy module is not a repair module. It is a weapons system, specifically used for boarding and/or sabotaging enemy spaceships.”

“Shit, that’s the last time I try to buy tools from a gun dealer. Sabotage, huh?” Vasquez thought about the tool kit attached to the outside of the jar in the light of this new bit of information. The laser welding torch that was way too hot on its highest setting. The sonic drill that made such short work of ceramic plate. And those crazy engines. He never did figure out why any satellite repair module would need so much delta v. Now he knew. And what had the computer said about passive radar?

“So, let’s assume for the moment that I’m not James fucking Bond over here. Do you have any idea how I might sabotage this enemy space ship?”

“Sir, I’m unable to process your request due to incomplete information on the enemy spaceship. Please update the specifications file to the latest release and resubmit your query.”

“Oh, not this shit again.”

“Update the specifications file to the latest release and resubmit your query.”

“Just shut up already.” Vasquez hit the reset button again. He had work to do now. He had to calculate the angle and length of burn he’d need to get his jar down into the intersecting orbit, and for that he’d need a computer that worked. Then, he had to come up with a way to sneak on board that spaceship. For that, he needed a miracle.

Emilio Vasquez had studied military ship designs ever since he learned how to read. His father had been right that he didn’t meet the physical requirements for the military, but he had the mental capacity. He knew about every kind of engine used in spaceship design, both the real ones and the experimentals. He knew a little something about the magneto-warp engine. Enough to recognize that the spaceship that grew steadily in his front window was carrying one. There was no other reason for the six hundred meter torus with graceful radiating fins arching outward in a wedge shape. The torus was a superconducting magnet filled with a ferropolymer fluid. The crew was housed in a disk suspended inside the torus. The engine worked by pinching magnetic force lines and pulling itself along like a spider on its web, thus creating movement without throwing away propellant.

No military power was using magneto-warp engines that Vasquez knew of. But the solar system was a big place, and there were all sorts of secrets out there. Whoever had built this ship obviously saw Venus as an easy target, a rich source of material defended by people too stupid to get jobs policing any other planet. The only thing standing in the way of victory was a junk collector in a second hand jar with arms that

was low on battery power and, truth be told, getting a little stinky on the inside. A pretty safe bet, in other words.

He was less than a kilometer from the ship, which was still just hovering over the pole, waiting for the miners in Cupid to heat up and die, or blast off from the surface and die. The cloud cover had rolled back in, hiding them, but not protecting them.

He had dared not use his engines since he had rounded the arm of the planet, not even the compressed gas thrusters. The flight computer, collaborating with the strategic advisor, had been able to put him right on a collision course hours ago, so running into the enemy ship was a done deal. He would reach out and grab part of the ship as carefully as he could and hope no one heard the noise. And then he'd find an external maintenance panel to get at some vital components. That was where he stopped hoping. Past that was just too far. The computer had come up with a couple more suggestions for getting onto the ship that didn't involve kung-fu and advanced hand weapons, but Vasquez wasn't sure. He'd never heard of a data thief, the device that would fool the enemy ship's computers, and he didn't dare ask any specifics for fear that the strategic advisor would crap out on him again.

The ship loomed in the scope quickly, a radiating fin seeming to slice toward him like a giant knife. He readied the waldo arms. The dead black surface swept underneath him, blocking out the yellow cloud cover of the planet. Vasquez made a grab for the trailing edge. The feedback told him he had something, then the arms were pulled up sharply. The failsafes locked out the waldo rig before the force could rip his arms out of their sockets, but his funny bones stung terribly just the same. The big arms had stretched

about thirty meters to absorb the shock, and were now recoiling slowly. He hadn't know they could do that.

He was there. No matter what happened now, the murderers on this ship would get a hell of a shock at some point. Someone had managed to get an attack module attached to the outside of their state of the art war machine.

With the arms reeled in, Vasquez began to slowly travel, hand over hand, down the fin toward the torus. When he got there he pulled the jar up over the torus and into the narrow space between it and the disc that housed the crew. There were not many handholds on the edge of the disc, but he found a service hatch outlined in yellow. Nearby was a flattened oval attached to the side of the hull. He couldn't tell how it was attached, so he reached across the gap between the torus and the disc, grabbed the edge of the oval thing and slowly put the weight of the jar on it. It held, so he pulled the jar across the gap between the torus and the hull.

“You're going to have to walk me through this data thief setup, buddy. I didn't even know what it was. I've just been using it as a claw for holding spare parts while I worked with the hands.”

“That is a creative use for the apparatus, sir. However, you will find that the thief can extract information from any standard or non-standard data port configuration.”

“We just need to find a data port. Let's try under this cover, shall we?”

Vasquez held on to the flattened oval thing with one large hand, then used a medium hand to try and open the hatch. It was locked closed, of course. The laser didn't exactly make short work of the job. It took a couple of minutes to cut away the latch. Vasquez was sweating by the time he was finished.

“God damn, I can hardly catch my breath,” he mumbled. He glanced at the environmental status display on the wall of the cylinder. CO₂ levels were high, temp was high. The lights started to flicker. The battery was failing. “Shit, how could I lose power this fast?”

“Sir, your use of the laser hastened the decline in battery power.”

“Oh, shit, I hadn’t thought of that. I’ve got to switch those batteries, quick.”

“Sir, if I may offer one more piece of advice, you will probably find a power jack under the hatch you just opened. It would be far faster to access that power source than it would be to dismantle my processor and change out your batteries.”

Vasquez shook his head. “You’re right. Why didn’t I think of that?” He pointed his finger at the green screen. “Don’t answer that.”

Vasquez reached out and opened the hatch. Inside were several types of data and power jacks. He identified the one that was compatible with the jar’s power system and plugged the power boom into the appropriate outlet.

The lights brightened immediately, and the air handlers kicked back in. Vasquez hung his head and rested as the cool dry air washed over him and dried the sweat on his skin. It took a while for the scrubbers to get the CO₂ back down. When they did, he was finally able to catch his breath. It had been seven hours since he’d last eaten, and he could feel the radiation sickness coming on slowly. He felt close, very close, to the limit of human endurance.

“Now,” he said. “Let’s see what this data thief can do.”

The thief had a series of metal pins that adjusted to fit into any configuration of data port. He positioned it over each of the open data and communication ports and let the computer configure the pins and insert them.

“OK, now what?”

“The thief will send probes through these data terminals and attempt to gain control of any command functions. It should take approximately five minutes for the results to come in.”

Movement caught Vasquez’s eye. He turned to look out the window in time to see a figure in a space suit swing up over the torus on a cable and disappear on the other side. The figure moved with an ease of someone born to space combat. It was moving toward the jar.

Vasquez pulled himself into the waldo rig as fast as he could. He didn’t bother with the right arm. That one was holding the jar in place. Vasquez shifted up to the big meat hook just as the person in the spacesuit swung back under the torus towards the module and brought up a weapon of some kind. Vasquez caught the attacker in his meter-wide claw hand and squeezed. He felt the initial resistance, then the snapping of bones. Vasquez felt a little bit sick.

The jar rang with the impact of a weapon, and a dent appeared under his feet. He turned the scope in that direction and found someone with a rocket rig flying under the jar, pointing a weapon. He drew back his arm and threw the body he held in his fist. His aim was good. The cable snapped and the body crashed into the guy in the rocket rig and knocked him off course toward the yellow cloud deck of Venus.

“Jesus, what the hell was that just now?”

“Sir, structural integrity is slightly compromised as a result of the attack. No damage to critical systems. It is likely that other attacks will follow. Might I suggest that in the future, you make use of the targeting sight and the laser to fight off these attacks, rather than the actuator arm.”

“Oh, thank you very much, mister come in with the advice after everyone is dead. Is this how you helped out the Ticonderoga?”

“I have no memory of events that occurred on the Ticonderoga, sir.”

“I can’t believe I just killed two people.” How was he supposed to fight his way on board this ship if he couldn’t stomach the idea of killing people? This was war, right?

“Sir, the data thief has returned with the results of its probe. It has gained control over some of the ship’s systems, but not all of them.”

“OK, well, that’s good then. Can I keep these people from coming out and attacking me?”

“No, sir.”

“Well, can I get the airlocks open and get onboard?”

“No, sir. Airlocks are not available.”

“Life support?”

“No, sir.”

“Communication?”

“No, sir.”

“Uh, OK, here’s a thought. Why don’t you tell me what we do have control over. That might be faster.”

“I’m listing them on the screen now, sir.”

The list was pretty short. It didn't even take up the whole screen. "Well, it looks like I'll be able to disrupt the food service in the ship's cafeteria. That'll teach these bastards not to attack *my* planet."

"That is unlikely, sir."

"Hey, and I've got plumbing, too, so I can back up the toilets."

"That is of dubious strategic value, sir."

"Hold the phone, daddy." Vasquez pointed his finger at the screen.

"We do not have access to communications, sir."

"Plumbing. That includes heat exchange, doesn't it?"

"Yes, sir."

"Maybe I could make them cook in there like they're doing to Cupid. Of course, it would take hours to get the heat up to dangerous levels. Now, then engines, on the other hand. They must be using a lot of power to keep hovering here. These magneto-warp engines are supposed to put out a lot of heat. Just look at the size of those radiating fins. Now, if the heat exchange is stopped, the ferropolymer overheats and breaks down, the engine can't generate a magnetic field anymore and it'll shut down."

"I am unable to assess the effects of a disruption in heat exchange on this ship design. Please update the specifications file to the latest release and resubmit your query."

"No, please don't do this, not now."

"Update the specifications file to the latest release and resubmit your query."

Vasquez punched the green screen with his fist. "You son of a bitch," he screamed. Blood from his torn knuckles smeared across the letters on the screen. "Not

now, you son of a bitch.” He hit the reset button. Nothing happened. He looked down at the dent in the bottom of the jar. The processor was plugged in down there. It could have been damaged in the attack. The green screen wasn’t changing.

Well, there was one change. The food service option was highlighted, glowing bright green under the blood from his hand. He reached up and touched the screen again, under the plumbing option, and it was highlighted. The screen was touch-sensitive.

At the bottom of the screen was the word ACCESS. He touched that and was given a new list of options. He selected HEAT EXCHANGE, then the word DISABLE appeared. He got ready to touch that word.

And he paused. He knew what would happen if he managed to shut off the heat exchanger. He had come this far to save himself, but what he was about to do was suicide. His finger hovered over the word DISABLE. He realized that he wasn’t going to save himself. That had never been possible. Then he thought of the miners in Cupid and the other smaller bases on Venus. He couldn’t save himself, but he could save them.

Vasquez took a deep breath and touched the screen.

Something stopped. Working in space, you never noticed the various hums and rattles of the machines that constantly surrounded you until they stopped. Some noise on the enemy ship that had been transferred through the hull, through the waldo arm, and into the jar, wasn’t anymore. Then he heard the faint and faraway sound of an alarm.

“Critical Heat Exchange Failure” was displayed on a screen inside the service panel. Vasquez waited, fingers crossed, listening for the sound of the exchangers coming back on. They must have a backup system, right? But the warning message kept blinking. Then he waited some more. Surely they would come out here and kick his ass

now, right? He had monkeyed with their ship, they must be pissed as hell. But no one came. So he waited some more, until the faint sound of the alarm changed its tone.

“Emergency Engine Shutdown” was the new message on the screen. The massive spaceship no longer hung perfectly balanced over the north pole of Venus. Now it was spinning, and falling.

“I’ll be damned,” Vasquez mumbled to himself. He knew the limitations of the technology, the dangers of this engine design. But what he knew was theoretical, the design of the magneto-warp engine as it was years ago, before it had even been built. And yet, here was the proof that the limitations were still there. Engineering had not found a way around the problem after all.

There was a jolt, then a second. Vasquez watched out of a window as two escape vehicles blasted away from either side of the disk and headed toward the horizon. It appeared that the crew had taken the opportunity to exit, stage left. Not a bad idea. He switched on the radio and dialed in the frequency from memory.

“Cupid base, this is Emilio Vasquez. Come in Cupid.”

“Who?” came the answer.

“Emilio Vasquez. Listen, I just wanted to tell you guys that the spaceship that was bombing you is going to crash into your planet, so you can go ahead and jump in your escape pods. Tell the other mining bases, too, just in case they can’t hear me.”

“Emilio Vasquez, the junk man?”

“Yeah, let’s see if we can all get on the same page, guys. Vasquez the junk man is telling you it’s time to get the hell out of there. You might want to wait until the ship crashes so you don’t hit it on the way up.”

“Why is the enemy ship crashing?”

“It’s a long story, Cupid. They had some plumbing problems.” He coughed up a little blood, wiped it off his chin. He didn’t want to sound like a hero. Even though he felt a little bit like one. “You guys think you’ll be OK waiting for a rescue?”

“Sure,” the voice from Cupid said. “Resupply is coming in a week. Our escape pods are good for at least that long. What about you?”

“I believe I’m crashing along with the enemy ship. Good luck, Cupid.” He switched off the radio. He didn’t feel like finishing that conversation.

The spaceship was shaking and spinning fast, now, and headed toward Venus. Vasquez wondered what he should do next, ride it down to the planet surface, or jump off and hope for a trajectory that would take him out away from the planet? He chose poor odds over no chance at all. He pulled himself into the rig in order to release his grip on the flat oval thing, but the shaking of the spaceship beat him to it. The jar broke off and was flung out by the spin. The lights dimmed right away, and the soft hum of the air scrubber quit. He watched the ship slip into the yellow sulfur clouds of Venus, as he sailed off in the opposite direction.

He looked into the scope and saw that the flat oval thing was still gripped in the claw of the waldo arm. It was difficult to shift it without the servo motors, but he managed to do it. It was something to do while he waited to suffocate. He turned the thing over. On the other side, next to a standard air lock adapter, was a sign that said

Single Occupancy Module

Type 9: MEDEVAC UNIT

With Robodoc v. 4.1

Vasquez grinned and started to line up the air lock adapter with the one on the jar.

Nice piece of salvage.