

# Merciful Troubleshooter

E. William Brown

Subject to change.

# **Contents**



Felicity was deceptively pretty from space. Hundreds of carefully engineered biomes covered the whole planet in shades of green, dotted with clumps of white clouds and the pale blues of lakes. The planet's three small oceans were a deeper blue, with belts of more green marking the vast equatorial reef systems.

After six months of living in artificial environments it was a tempting sight. It would be so good to see a forest again. To walk through a green wilderness hundreds of kloms from any settlement, and see animals living wild in their own habitats. I could catch a meal with my own two hands, go swimming in one of the deep lakes to clean up, and sunbathe on the shore until I got hungry again. Or I could explore all the new vistas that my enhancements opened up, now that I wasn't half dead from malnutrition. What would it be like to go tree running in an actual forest, or flying under an open sky?

But only half of Felicity's disk was in sunlight from our position. The other half was in darkness, and there was not a single light to be seen in that entire expanse. No cities. No industry. No busy spaceports handling gigatons of daily cargo, or skyhooks reaching for the stars. The one great accomplishment of the dryads was paying someone else to transform the barely-habitable mudball they'd found into the lushly forested biosphere I was looking at. Since then they'd done their best to turn themselves back into the mindless herd animals their religion claimed humans were descended from.

They couldn't even get that right. Humans are predators. We clawed our way up the food chain one bloody fight at a time until we'd conquered our homeworld, and then outer space, and eventually even other universes. We're almost certainly the first spacefaring species in the multiverse, bursting forth from our lost home to seed the galaxy with life. The only real obstacle in our path is our own tendency towards self-destruction, and we've made some progress on those old intractable problems of governance and stable social organization in these last few centuries. We'll find a better solution one of these days, and until then at least we can boast that the only thing we can't conquer is ourselves. What's so wrong with being proud of our heritage?

A hand on my shoulder broke me out of my thoughts. "Nervous?"

I looked up at Kavin, and mustered a smile. My boyfriend was looking especially tasty today, all decked out in powered armor. Yum.

"A little," I admitted, leaning into him. "This place brings back a lot of memories. I was stuck with these crazy people for a long time, and I guess part of me is afraid of getting trapped again."

"That isn't going to happen," he assured me. "We've got a solid extraction plan, and plenty of contingencies. I'm not going to let you down, Alice. But if you're really worried, we can always scrub the mission."

I shook my head. "No, I have to do this. Dika is my best friend, Kavin. I can't just abandon her to a bunch of brainwashed fanatics. Sooner or later they're going to figure out that she's just playing along while she looks for a way out, and there's no telling what they'll do to her then. I'm already worried that it might be too late."

It had taken a lot of work to arrange this trip. Felicity's security forces knew that I'd left on the *Square Deal*, so trying anything while the ship was in port here would have been really dumb. But I couldn't just ditch my job and go running off to try some crazy scheme, either. I owed Captain Sokol better than that, after all the trouble he'd gone through to help me out. Besides, I wasn't ready to strike out on my own yet. I still had a lot to learn, and it takes time to build a plausible-looking resume. Another year or two at least, and even that would make me look like some kind of genius prodigy.

Human space is full of research projects that turn out geniuses or supersoldiers, so I had some wiggle room there. But I had to be careful not to take it too far. The great powers of the Inner Sphere

I was so startled I didn't even react for a good twenty milliseconds, and that was way too long. By the time I started to move the sheets tangled around Dika's legs had attached themselves to the bedframe, and it was deploying capture web around us. I wasn't about to abandon Dika, and I couldn't justify giving away any big secrets to fight what was obviously some kind of nonlethal capture bot, but that didn't leave me with a lot of options.

Who could possibly have set this up? This bot wasn't some cheap commercial design. Even Dika would have spotted something like that, let alone me. To be that good at hiding itself, and move this fast once it activated, this thing had to be cutting edge espionage tech. Well, cutting edge for the Outer Sphere, anyway. But Felicity didn't have access to that kind of thing, did they?

I popped the monofilament blades hidden in my suit's fingertips, and tried to cut Dika free while I held the capture web at bay with my field. But the whole surface of the bed was warping to wrap itself around us, just a fraction of a second behind the strands of capture web. Then a field generator spun up, and tried to neutralize the shield I was projecting. It was a crude, simplistic field geometry, but way too powerful to fight without lighting my reactor.

My blades cut the cloth of the blankets, but broke on a webbing of hardened threads that had been hidden inside the softer material. Then it was too late. We were wrapped up in a cocoon of mattress and capture web, pinned together face to face with only our heads exposed. The bedframe was only a little slower, shedding its wooden veneer to expose hard armor as it shifted to enclose us.

Dika screamed. But there was an active sound suppression field around us, so the noise didn't make it very far. There were about a million different knockout drugs hitting us by then, but we were both immune to that kind of thing. I was a little surprised that the sonic stunner didn't work on Dika, though.

I managed to get my arms around her before the capture web completely locked us in place. She struggled frantically, but it didn't make any difference at all. Then a couple of limbs that looked like animated branches wrapped around our heads, and turned on their neurostim fields. Dika sagged, relaxing, and her eyes went glassy.

The field didn't penetrate my skull, since the bone there had turned into shielding and armor over the last few months. But the embedded sensors told me what I was supposed to be feeling. Floaty, relaxed and calm, without a care in the world. Alright, so maybe when I tracked down whoever planted this thing here I wouldn't actually kill them.

Maybe.

"Well, that was embarrassing," I said sheepishly. "Are you alright, Dika?"

"Yeah," she breathed, her voice dreamy and distant.

There was a prick at my neck, as a needle tried to poke me and broke against my subdermal armor. A brainjack? No, it was too small for that, thankfully. The broken needle leaked attack nanobots, the kind you use to take out someone's defensive nanites so you can do subtle stuff to them. They were no threat to me though, thanks to the tech disparity. I could bath in the things, and my own nanobots would just eat them wherever they tried to breach my skin. But Dika's defenses weren't as good as mine.

"Dika, do you still have my nanobots marked as allies?"

She blinked at me, slowly. For a second I thought she wasn't going to answer, but then her lips curved into a smile.

"Always," she purred, and rubbed her cheek against mine. "My Alice."

I could feel my face heat. "Good. Here come your reinforcements."

By the time the dropship landed I was already regretting that promise.

It wouldn't have been so bad for someone with more normal enhancements. But the intricate web of Mirai software that carefully inspected Dika's systems wasn't just a tool. It was as much a part of me as my hands, and I couldn't help but be aware of every secret it discovered in her personal files. I felt terrible about that, but how bad could a teenage girl's secrets be? When I suggested the idea I figured that at worst she might have a diary with some private thoughts, or a few video captures of embarrassing moments.

I totally was not expecting a bazillion terabytes of VR revenge porn.

Like most people from advanced colonies Dika had a VR implant. Unlike most people she also had a full suite of VR editing software in her head, and it was pretty well integrated with her mind. So her daydreams were high-fidelity virtual worlds, and she could save them to re-experience later if she wanted to. Apparently she had a lot of suppressed anger to work off, because some of the things she'd kept recordings of were, um...

I wanted to say horrifying. Certainly, anyone from Felicity would run screaming into the forest if they knew what was in my best friend's head. But fantasies about feeding the matrons to hexagators and spanking the bullies until they apologized didn't really phase me. I've seen worse things being done for real since I escaped the orphanage.

What bothered me was how often her fantasies had me doing the dirty work. In the older ones I was usually her loyal minion, using my combat enhancements to kick butt at her direction. Later there was a run where we did it all together, and the revenge ideas I suggested were way worse than hers. More recently there were some where I came back to kill the matrons, seduce Dika and make all the bullies kiss her feet.

And, um, other parts. Goddess, that was embarrassing. And kind of hot. Did I have a chance with her now?

No, that would be wrong. I needed to get her back to the ship, where Doctor Misra could figure out what those bitches did to her brain and fix it. If she decided she wanted to broaden her horizons that was one thing, but no one was going to force my best friend to be anything she didn't want to be.

Thankfully the scan only took a minute, but my ears were burning long before it was done. Dika looked away, red-faced and horribly embarrassed.

It was a good thing I'd done it, though, because she'd been hacked just as badly as I thought. Her implant computer's hardware was still secure, but her comm system was completely compromised and they'd somehow tricked her into installing a whole bunch of spyware. They'd hacked her brain too, and not just with the loyalty circuit she'd complained about. They could give her amnesia or turn her into a meat puppet at will, and her VR system was set up to make her hallucinate things whenever they wanted.

I cleared out all the hacks, restored her computer to its original secure state, and ran through the stupidly complicated process of re-issuing security tokens for all her peripheral hardware. It was a complete pain in the butt, but by the time the drop ship touched down she was clean again.

"I'm definitely not going to say anything," I said, my ears still burning. "But, um, when we get away, I know a good doctor who can figure out what they did to your brain and help you straighten things out. There's nothing they did that can't be fixed, and you get the final say. Okay?"

"Okay," she agreed, still not meeting my eyes. "Was I hacked?"

"Six ways from Sunday. But your electronics are clean now, and my nanites are eating the last of the hardware they put in your head. You might still feel a little messed up from all the brainwashing attempts, but the scary stuff is gone."

“My my, aren’t you a troublesome pair?” Agent Khan’s voice echoed down from intercom speakers set into the ceiling. “I can’t take my eyes off you for a moment, can I?”

Dika’s stealth suit was still settling into place, reshaping itself to perfectly fit her and preparing to deploy the head covering. But I only needed to buy us a minute. I gathered her hair into a quick pony tail, and gave Khan a cheery reply.

“Hey, it’s not my fault you bought cheap commercial bots instead of the good stuff. Seriously, no one uses KomanTech anymore. You should take a look at the Holstein line, or maybe Wayne-Renit if you’re paranoid about your vendors.”

“Apparently so, Miss Long. But what can you possibly hope to accomplish? You’re quite securely trapped in the cell block, and that was hardly my only warbot. Surely you don’t think you’re going to outfight a close assault squad single-handedly?”

I got Dika’s hair safely tucked away, and her suit deployed its helmet. Dozens of thin, flexible components slid over and around each other to enclose her head, and the moment they had a good seal she cloaked.

I smiled in relief. “Well, you never know until you try.”

By all conventional logic he should have been right. The hatch leading out of the cell block might only be a dinky little light-duty model, but it was still half a cen of proper smart matter armor. No matter what the mysterious devices in my storage compartment turned out to be, there shouldn’t have been any way through that. I obviously didn’t have a bulky nuke pack or mini-fission plant on me, or the giant pile of bombs it would take to do the job with chemical explosives.

Of course, conventional wisdom also said that it’s impossible to build a fusion reactor the size of a pool ball.

The device I’d attached to my right forearm must have mystified his security database, since it was an experimental Mirai design that was never actually fielded. It probably read as some kind of goofy zero-G maneuvering unit until I fed it a few grams of my tritium reserve, and the compact fusion torch hidden inside lit up.

A dense needle of million-degree plasma moving at nearly ten thousand kps erupted from the business end of the plasma lance. The thrust it produced was immense, and I had to anchor myself to the floor with half my field strength while the rest shielded Dika from the backblast. But its cutting power was equally huge. I swept it in a short arc, cutting through the door’s locking mechanism in moments, and then shut it down.

The edges of the resulting hole glowed white-hot for a moment, before the door’s built-in heat management system sucked the excess energy away. That was a standard feature meant to protect against beam lasers, but it was pretty convenient for me. I stuck my hand in the hole, which was now cool enough that I could touch it safely, and wrenched the hatch open. The motor tried to hold it shut, of course, but I was a lot stronger than it was.

“Crash, Alice. What was that?” Dika exclaimed.

I sent part of my sensor swarm out into the drop shaft to scout ahead while I answered her. “A plasma lance. Basically an open-cycle fusion reactor, just like a starship’s drive, only it focuses the exhaust plasma into a tight beam. It makes a great close-range weapon, doesn’t it?”

“No wonder my radiation sensor is screaming at me. Try not to get too carried away with that, okay? I know it can’t hurt you, but I’m only good to about a thousand rads.”

“Yeah, yeah, next you’ll complain about mussing your hair. Alright, it’s safe out there. Go ahead and duck through.”

The aircar was filled with an uncomfortable silence as we lifted off, and headed for space.

It was a big luxury model, just like Dika had predicted. The interior was laid out like a living room, with space for half a dozen people to lounge around enjoying each other's company while the car delivered them to their destination. There was no control panel in the front, of course, since it was designed for lazy rich people who couldn't fly a car manually to save their lives. But it was so big it had room for a bathroom in the back, and even a small bedroom behind that.

Usually Dika would have scurried off to investigate everything, but not this time. She just sat on the couch next to me, staring listlessly out the window as the jungle fell away below us.

For a few minutes I was busy digging into the autopilot's code, making sure I could take manual control if anything went wrong. Then I had to tag Kavin's ship with one of our pre-arranged signals, and plot out an intercept course that a civilian aircar could actually manage. No zooming to orbit on a column of fusion flame for us – once we broke atmosphere all we had to maneuver with was some dinky little thrusters, and it would be easy to run them dry. Starships usually tool around with a thousand or so kps of delta vee in the tanks, but this thing barely had twenty.

Still, it was enough. As the sky outside started to turn black I saw that the *Gadfly* had cast off from Felicity's low orbit station, and was coming about to match vectors with us. It wouldn't be long now.

I put my hand on Dika's shoulder. "Are you alright?"

She gave me a wan smile, and went back to staring out the window. "I'm just nervous. Waiting for something else to go wrong. I don't know how you can be so chipper after everything we just went through, Alice. Goddess, I could sleep for a week."

"That's just the post-danger adrenaline crash hitting you," I said. "Maybe you should take a shower, and get the smoke out of your hair?"

"I'm not taking this suit off until we're safe," Dika declared. "For all we know the couch is going to try to eat me as soon as we leave atmosphere."

I chuckled. "Trust me, that's one mistake I won't be making again. I checked everything in here before I let you sit down. The chairs and couches all turn into survival pods if there's a hull breach, but they don't have any restraints. Just don't go digging around in the nightstand."

"Do I want to know?"

"I wish I didn't. I don't know what most of the stuff Khan has in there is even for, but some of it looks pretty scary."

That finally got a smile. "Still a prude, huh? Aren't you getting kind of old for that?"

"Hey, I'm just taking my time. It's not like I need to be in a rush. Besides, my development manager says that good girls get the best guys."

"You get dating advice from your cybernetics now?"

"Sometimes. Considering how much effort went into programming that stuff, I figure it knows what it's talking about."

"Or that's what they want you to think. Sounds like you might be serious about this boyfriend, though. Does he know the big secret?"

"No," I admitted. "I think he might suspect. Some of the stuff I've done would have given him hints, and he's pretty smart. But he hasn't said anything about it."

"I guess that means we can't talk about it on his ship. So, do I get to know? I could start making guesses. You've got to be Inner Sphere tech, and that only leaves so many options."

"I'll tell you," I said. "If I can't trust you, I might as well just give up on people. I just, well, it's pretty crazy. I don't want to scare you."



The Busy Beaver was a typical example of the little fueling stations that dot the more civilized regions of the Kerak Sector. The main body of the station was just a bundle of giant fuel tanks for storing various blends of fuel, with a little can of a habitat module sticking out one end. Three long booms extended out from the habitat, just open frameworks full of piping, with docking clamps spaced out along their length. Each docking clamp was a clever multi-mode setup designed to deal with a wide variety ships, since even 'standardized' features like that can vary a lot from one vendor to another. There were enough of them to handle a couple dozen ships, but less than half were currently occupied.

A day of rest and relaxation had done Dika a world of good, and she was eager to get her first look at a station. So when Kavin went to pay for gas she asked to come with him, and naturally Emla and I had to tag along.

We stepped out of the *Gadfly's* airlock into a docking tube, basically a pipe made of flexible smart materials that connected the ship to the station's main elevator bank. I noted approvingly that there was a heavy framework of armored panels around the docking tube to protect it from micrometeorites, and the climate control was good enough that it was room temperature by the time we cycled through the airlock. But I still stuck next to Dika, just in case, and made a mental note to get her a space suit as soon as possible. Accidents happen, and you don't take chances with hard vacuum.

The elevator turned out to have a neat display setup. It was really an armored box moving down a shielded tube in the middle of the docking boom. But from the inside it looked like a glass elevator, thanks to the display panels that covered the walls. Dika gasped at the view, and eagerly pressed her nose against the nearest display to take it all in.

There were a couple of private yachts docked on the same boom as the *Gadfly*, along with a battered old freighter and an antique scout ship that was probably older than the four of us put together. The rest of the view was filled with the hard glare of distant stars, with the system's little red sun just a slightly brighter star among all the others.

Dika ignored that, focusing on the ships. As the elevator passed each one she carefully examined their armored hulls, and the swarms of bots that were busily managing fuel lines and doing external inspections. Then her gaze dipped to the habitat section below us, which was decorated with a giant neon sign showing a grinning beaver's face.

"Who are they trying to advertise to?" Dika asked. "That's what signs like that are for, right? But no one can see that from a passing ship, can they?"

Kavin chuckled. "It's a nostalgia thing, Dika. Part of their corporate image. The Busy Beaver chain is supposed to remind people of a truck stop. Which I guess is another thing you've never seen, since I'm sure Felicity doesn't have them."

"So it's décor, for people who are already stopping here? That makes more sense. I was just wondering how they get business, because this seems like a pretty remote system."

I had to agree, it was pretty bleak. A dinky little red star circled by a single gas giant and a modest collection of barren rockballs, none of them inhabited. The gas giant had a nice set of rings, but that was the only vaguely interesting thing in the system.

"You'd be surprised. A lot of people who have their own ships like to take vacations in them, and wandering around empty systems checking out the scenery is pretty popular. But I suspect a lot of their business is people like us, who want to obscure their movements a bit. If you jump straight from one major system to another it's easy for traffic control to check your exit vector, and see exactly where you're going. But operations like this don't keep records of where their customers went after refueling, so even

The whole Federation is only thirty light years across, and Felicity is pretty much in the middle of it, so the trip back only took us a few days. Just long enough for Dika, Kavin and I to start to settle into a routine.

Dika was fascinated by the artificial environment of the ship, and I spent long hours just showing her around and explaining basic things. Of course, the military features that I'd thought were so interesting only bored her. But the mundane details of shipboard life were another story.

Apparently there's a big trend now in the Outer Sphere for small warships to make up for their cramped living conditions with an extensive virtual reality system. In real space our quarters were just a couple of tiny bedrooms with a shared bathroom in between, but in the ship's habitat VR we had a cozy six-room cabin on a snow-covered mountainside. The crew's homes were arranged to form a rustic rural village, and there were a bunch of neat little amenities like a shooting range and a public bathhouse. The simulation included a few hundred square kloms of surrounding wilderness, so you could go skiing on the mountain or take walks in the woods.

To me the whole thing was kind of annoying, because the VR couldn't begin to fool my senses. So whenever I went there it was like stepping into a pastel cartoon world, where tastes and smells barely existed and everything was subtly wrong. But Dika loved the snow, and wanted to explore everything there was to do there.

Fortunately the crew wasn't very busy while the ship was in hyperspace. I'd been worried that Dika might not get along with them, since even the girls were rugged military types with a taste for recreational violence. Most dryads would have been terrified of them, and spent the whole trip in hiding. But cute little Dika seemed to bring out their protective instincts, and she charmed everyone she met.

"I've never felt so safe," she confided one evening, as we watched some of the crewmen practicing martial arts in the village dojo. "If anyone tried to hurt me here these guys would flatten them in a heartbeat."

"You bet," I agreed. "Sleeping Dragon's troops are pretty good, and they all like you. But you don't want to learn how to fight yourself?"

She shook her head. "There's no way I could do that. I'd be really bad at it, and besides, look at me. I'm tiny, and my mods aren't built for violence like yours. I'd just get myself hurt."

"I guess it would be a challenge," I admitted. "But you sure like watching the men fight."

She licked her lips. "A bunch of beefy guys getting all sweaty and taking off their shirts? What's not to like?"

I giggled. "Perv."

"Hey, I'm just making up for lost time. I knew I was missing out, but I never realized how much. I want to get me some of that."

"I'm not stopping you, girl. Just remember to lock your door if you have company."

"Don't tempt me, Alice. I'm trying to keep it together until I can talk to that doctor of yours, and get my head straightened out. But it's hard to resist so much beefcake. Especially when Kavin's around. That deep voice of his just... does things to me."

"Trust me, I know."

She grinned, and leaned against me. "Have you guys done it yet?"

"No!" I protested. "We've just kissed, and sparred together, and, um, stuff like that."

"Stuff? What does that mean? A little groping and squeezing, maybe?" She teased.

I blushed. "Maybe. I don't dare go any further, though. Not until I'm sure he's the one."

"Afraid you'll fall for him?"

Kundarak station was a gleaming bastion of ultramodern efficiency. The corridors bustled with activity, all neatly segregated by purpose and social class, with clever arrangements to minimize waste and lost time. The middle-class corridors we traveled through were full of ship's crew coming and going from vessels that were in for major servicing, and the occasional dwarven customer rep or salesman hurrying from one meeting to another.

Emla, Dika and I took a short ride down a people-mover to a public transit station, where a little subway car arrived just in time to pick us up. All three of us were in spacesuits with the helmets retracted, and Emla and I wore our usual sidearms, all of which clearly identified us as spacers.

"Welcome to Kundarak, ladies," the car's AI greeted us, its voice a deep but oddly pleasant rumble. "Heading for the *Square Deal*?"

"Yes, please," I answered.

"Very good, ma'am. Please be seated, and I'll have you there shortly."

A rowdy group of catgirls piled into the car behind us, chattering excitedly about the progress of their new ship. I guided my companions into the front row as the AI greeted the new arrivals by name, offering advice on the best restaurants near their hotel. The bot with our luggage followed along behind, and floated up to attach itself to the ceiling.

"How does the AI know who everyone is?" Dika whispered.

"I'm sure it has no clue who you are," I explained. "But the transit system saw us leave the *Square Deal* last week, and the AIs are smart enough to guess that Emla and I are probably crew members headed back to our berths. They have a shared face recognition database, and I'm sure they keep track of everyone on the station."

"That's kind of creepy. Do all colonies have public surveillance like that?"

"Just the big ones, and not all of those," I assured her.

The doors closed behind us, and the car pulled away from the station. There were plenty of windows, so we all had a good view as it deftly wove through a maze of twisty passages before emerging into a long, straight tunnel.

"My basic education says it's a public safety issue," Emla put in. "But my survivalist skill pack says that's just an excuse, so I'm not sure which part to believe."

"Both," I said.

"What do you mean, both?" Dika demanded. "Doesn't it have to be one or the other?"

"Nope. See, there really is a big public safety issue when you have millions of people living together. Everyone wants to have a fabricator in their apartment, because it's so convenient to be able to just build things whenever you need them instead of arranging deliveries. But most people don't want to bother carrying a gun, let alone setting up a comprehensive security system. So what happens if a terrorist starts fabricating some nasty self-replicating bioweapon?"

"The Invasion of the Brainworms!" Emla declared theatrically.

"Right. Or the deadly spiderbots, or rage flu, or a million other kinds of nasty stuff. Survivalist colonies deal with that by saying everyone is responsible for their own security, and if someone fabs up a rampaging monster his neighbors should just kill it. But big governments love to use the problem as an excuse to set up a giant surveillance system, restrict ownership of fabricators, and control people's lives in the name of safety."

"I see," Dika said. "So they do things differently in every system? That must be confusing."

"Sometimes even for different stations in the same system," I agreed. "Fortunately you don't have to worry about local laws too much as long as you don't leave the spaceport. There's a standard treaty

You'd think watching a swarm of bots load cargo containers onto a freighter would be a boring job. The last few times I'd gotten stuck with this duty had certainly been dull, and this was going to be a much bigger load than our usual runs. But of all the places I'd been since joining the *Square Deal's* crew, the Glare system had the most spectacular scenery.

The system was in the Alpha Layer, a universe much younger and denser than Normal Space. Supernovas and gamma ray bursts were so common here that trying to set up permanent colonies was impractical. The Grand Survey had cataloged every star and planet in the sector three hundred years ago, and the astronomers kept track of where the various blast waves and radiation beams were so shipping could avoid them. But aside from a few observatories and the occasional reckless prospector people rarely stayed here for long.

A glance at the roiling sea of molten metal below told me that might change, if word of this discovery ever got out.

Sixty years ago Glare had gone supernova, vaporizing most of its planets and blowing the debris off into interstellar space. Back then the Kerak Sector had been a wild frontier, and for a long time no one had paid much attention to the birth of yet another neutron star.

Until a few years ago, when some clever guy went over the data and realized that the system's biggest gas giant was just massive enough to leave a remnant behind. The supernova had stripped away all of the planet's outer layers, leaving behind only the dense inner core. But it had been an unusually old gas giant for the Alpha Layer. Old enough that the denser elements had mostly settled to the center of the planet.

The object the Lucky Strike Gang had dubbed Paydirt was a ball of molten metal twice the size of lost Earth. And not common metals like iron or nickel, either. With a density of nearly twenty grams per cubic centimeter it was mainly tungsten, with substantial amounts of stuff like osmium, iridium and platinum. Elements that you normally find in tiny little deposits, or else have to grind up whole asteroids to recover at a rate measured in parts per million.

Here, all you had to do was scoop it up.

There was nowhere to land, of course. There was no solid ground anywhere on this inferno world, and no artificial structures big enough to handle a ship the size of the *Square Deal*. But for a customer as rich as these guys were going to be, we could make do. We'd rigged a huge webbing of emitters that stretched out for kloms around the *Square Deal*, expanding the ship's lift field into a bubble big enough to float in Paydirt's tenuous upper atmosphere. Then we dropped a skyhook down to the Big Dig, the Lucky Strike Gang's mining platform, so we could use it to haul up cargo. But naturally someone needed to inspect the cargo containers for dirty tricks before we let them on board.

Which is how I found myself hovering several kloms up over a sea of molten tungsten, watching the brilliant x-ray glare of a young neutron star shine through an atmosphere that was mostly gold vapor.

It was a beautiful sight. Glare had just risen a few minutes ago, but it was climbing rapidly thanks to Paydirt's fast rotation. The metal sea shone with a bright orange glow, casting reflections off golden fog banks below and the mirrored hull of the *Square Deal* a klom above me. But to my senses the star's light was much brighter. Ultraviolet radiation sent eerie fluorescent glows dancing across the waves, while the brilliant cascade of x-rays sparked off the surface in a constant crackle of miniature lightning bolts. An indistinct mutter of gravity waves washed over my sensors, hinting at ongoing activity inside the unstable young star, and my physics sense whispered uneasily about the extreme energy levels of everything I looked at.

It was exhilarating, and I could have watched it all day. Too bad I was here to work.

For the first time in my life I was actually a little scared by the weather. Glowing droplets of molten platinum whipped past in a roaring blur, carried by winds that made a normal hurricane look sedate in comparison. The weather shield kept the worst of it at bay, but the roar of the wind battering against that invisible barrier was deafening. It rose to a high-pitched shriek around the skyhook cable, and the hole in the weather shield around it.

One by one the massive cargo containers rose through the gap and presented themselves for inspection. Unstable eddies of wind came with them, carrying erratic bursts of glowing rain to spray out into our protected space. Luke had nervously parked his aircar at the halfway point between the weather shield and the ship's hull, out of reach of the deadly rain.

I didn't have that luxury. It was only a hundred meters from the weather shield to the ship, and after that last surprise I was all out of trust when it came to the contents of the cargo containers. You could fit a whole lot of nasty surprises in a box that big, and I wasn't taking any chances on some crazy boarding attempt making it past me. So Emla and I were as close as we could get to the hole in the shield, struggling with the wind and rain while we vetted containers as far away from the ship as possible.

I'd already rejected two more containers, which told me this job really did need to be done. But I could see all too well what would happen to me if someone turned off the weather shield. Emla and I were already running in combat time, tracking those sprays of molten metal and batting them away with brief flickers of our personal deflector shields. It was running up our heat load, but there was no other choice, because that rain was hot enough to wreck my suit's reflective layer in seconds. The insulation wouldn't last much longer, and tough as I was my own body wasn't rated for that kind of abuse either.

If I was directly exposed to the rain I'd have to keep a strong deflector shield up continuously, which would drain my power cells in a matter of minutes. Or else I could light my reactor, and then my heat sink would overload in about the same amount of time. Not to mention that trying to fly in these conditions would be a nightmare, but hitting that molten sea below us would be even worse. No, my only chance would be to grab the skyhook cable with my field before the wind could carry me off, and then pull myself up to safety.

I glanced up at the ship, and reassured myself once again that I could make it in time. Probably. If the wind didn't pick up too much. If the rain wasn't too dense.

Yeah, this wasn't safe at all, even discounting the possibility of nasty presents in one of these containers. I really wanted to send Emla back to the ship. But I knew perfectly well that she'd refuse to go as long as I was in danger. So instead I had to let her stick by my side, keeping her sturdy, armored body between me and the worst of the spray. Never give an order you know won't be obeyed, right?

"Engineering, Alice here. Can you guys give me a ping if you need to reconfigure the weather shield?"

Mina answered the call, but there was a short delay before she replied. "Alice, why does the status list say you're still on EVA?"

"Because there's still cargo on the skyhook, Mina. Those containers won't survive going all the way back down the cable in this weather, so it's either clear them or dump them. I'm inside the weather shield, so it's not too bad, but things would get really exciting if you had to reconfigure it."

"Damn it, Alice, they should not have you out there risking your life over a few containers of heavy metals. You'll get your alert, but finish up and get inside as quick as you can. We've having stability problems with the lift web, and we might have to ditch it."

Crash. The ship couldn't hover without that lift web. It was too dense, and the atmosphere was way too thin. They'd have to drop the skyhook cable, light the main drive and retreat to orbit, which would

"It's a stainless steel rat," Mina pronounced.

Chief West had insisted no one should be exposed to the remains of the bots I'd taken out, so they were safely locked up in a reverse-engineering clean room. Mina was hunched over a control panel, carefully taking them apart with remote-controlled waldos.

For my part, I was a little grumpy about having to spend an hour getting checked for contamination in Dr. Misra's biowarfare lab. I didn't even know he had one of those, and it raised a lot of questions about who he really was and what he was doing on some tramp freighter. But the grumpiness was more because I knew perfectly well I was fine, only no one would take my word for it.

What was I going to do? Point out that the Mirai had the most advanced nanowarfare technology in the galaxy, and my own immune system was probably the most terrifying bioweapon ever created by humans? Yeah, I'm sure that would go over real well.

The engineering tech's announcement seemed to reassure Chief Benson, who grinned and patted her head. "Well done, Mina. It's good to hear we aren't dealing with anything serious. Can you tell which strain?"

"Mmm, thanks, Chief. Looks like some kind of GT-series variant, but I'll need a few minutes to nail it down."

Her tail curled around the chief's waist, and I turned away. Ugh, the foxgirls were so lovey-dovey, it was disgusting. Chief Benson always went around with no shirt on, showing off all those muscles, and the techs were always hugging and kissing and stuff. Didn't they have any consideration?

No, I wasn't jealous. Of either of them. Really, I wasn't.

"That's a weird name," I said. "Especially for a bot that hardly has any steel in it at all. So they're not an infiltration weapon?"

"Ah, I suppose this is your first encounter with synthetic vermin," Chief Benson said knowingly.

"The original version probably was an infiltration weapon," Mina said, still staring into her display. "Nobody is entirely sure who made them, because the idiots thought it would be a good idea to make them self-evolving."

"Isn't that, like, the number two stupid mistake in robotics? Right behind self-improving AIs? Why is this not a serious problem?"

Chief Benson chuckled. "Ah, that would be because the evolutionary landscape of small, stealthy scavengers has already been well explored, young Alice. A self-replicating bot that becomes a threat to the ship it lives on would be a massive security risk, and everyone who heard about it would adopt extreme security measures to prevent it from spreading. Every shipping company in the area would lose a great deal of money, but the bots would quickly be contained and eliminated."

"On the other hand, if the bots are cute little things that don't do much damage, trying to exterminate them isn't worth the money," Mina picked up the tale. "They're mostly harmless, and it's not like they report to anyone. The original model was built for spying, but they dropped that feature pretty quick. Getting data packets back to their makers was a huge investment of effort, and it gave people a reason to exterminate them, so their evolutionary optimizer dumped it."

"Huh. You'd think even idiots would see that one coming," I mused.

"Oh, I'm sure the original version of the optimizer AI had hard-coded safeguards to keep it from getting rid of essential features like that. It probably took dozens of generations of tweaks to get a rat that had an unrestricted optimizer."

"Makes sense," I agreed. "An optimizer designing new generations of bots that include their own optimizers turns into the Turn-Valing problem, doesn't it? It's like a hacker with infinite time beating on a