

COFFIN FOR THE LIVING

Brobdingnag: Chthonian planet, approximately five Earth masses, with an average surface temperature of 557 Kelvin, and 0.005 bars of atmospheric pressure. It is composed entirely of iron and other metals, with a diamond-carbon core. First imaged in 2039, and first landed on in 2271 during the colonization of the Delta Pavonis system. In modern times, its rotation has been sped up with an equator-girdling linear accelerator, reducing its surface gravity at the equator to 1.62 gees to enable economically viable extraction of its vast metal reserves. It is orbited by one large moon, Gulliver, which is currently being terraformed. Politically, it is under the jurisdiction of the United States of Columbia.

It started when I got the call from Columbian Resources. I must've made a name for myself somehow, because they put me on a torchship to Brobdingnag almost faster than I could pack my bags. We pulled two gees all the way there—an earthquake had just taken out most of the company's on-planet extraction capacity, and they needed people like me to come in and fix it as quickly as possible. Lying in an acceleration couch for a week and a half wasn't very fun, but at least I felt more adapted to Brob's 1.6 gees when I finally touched down. My employer was waiting for me as I came out of the jetway from the landing shuttle, and into the underground spaceport terminal.

"Jasmine Winters?" a black-haired man in a snappy business suit asked.

I nodded.

"Henry Anderson. Am I correct in saying you haven't worked here before?"

"That's right." I replied.

"In that case, you'll need to get fitted for a field suit. This way, please."

His service robot picked up my luggage, and I followed him to an open-topped maglev car. The spaceport was part of the only town on the planet, and was at one end of its main drag—a flat-bottomed tunnel about fifty meters wide with bars, shops, and hotels lining it, excavated out of the solid iron upper crust by a nuclear drill. The walls were smooth; almost reflective.

The car settled to the ground by the Columbian Resources consignment, right across the tunnel from a Patriotic Burger joint. I followed Mr. Anderson in.

The consignment shelves were almost completely bare—all the miners had rushed in to pick up repair parts after the quake, and the new shipments were just starting to arrive. But behind a door labeled EMPLOYEES ONLY—RESTRICTED ACCESS was a

different story. A robot dressed in the company uniform was waiting, with shelves nearby filled with the latest high-tech gadgets, and racks full of field suit parts.

“I’ll be waiting outside.” Anderson said, and left.

The robot directed me through the process. First, I stepped into a full-body imager, which took my measurements. Then the robot handed me two garments, sized to fit me: the inner layer of a mechanical counter-pressure space suit, with sanitary hookups, and an insulating layer coated with reflective foil.

My long tail was the complicating factor, but someone must’ve called ahead—they had a suit to fit it.

The inner layer was about as modest as a coat of paint; I put it on in one of the store’s dressing rooms, then threw the insulating layer over it. With the old skinsuits, you had to squeeze into them (they have to be tight in order to hold your body against hard vacuum), but this one was high-tech. Just slip into it like a pair of children’s one-piece pajamas and press a button, and it tightens right up.

I came out wearing what looked like a layer of thin padding wrapped in tinfoil, and the robot helped me get the suit’s cooler/air conditioner on, and screwed in a coolant bottle. Two tubes ran from that into the insulator: one pumping cold water into the garment’s mesh of cooling tubes, and the other taking warm water back to the cooling unit. A nuclear battery went above that, between my shoulder blades.

Next came the armor. It’s *hot* on the surface, plus it’s always bad when you slip and tear your suit. The armor was in a good dozen segments that went over the insulation, making me look like a ceramic and diamond-plated medieval knight. The final component was a powered exoskeleton—a must-have for doing any kind of work in Brob’s gravity. I clipped its components to attachment points on the armor plates, and powered it up. The helmet was similarly armored, and the visor was diamond glass. When I put it on, it was tinted so much I could barely see out, until I found the button to depolarize it. The robot had me plug the air conditioning tubes into it to test it out. When it was satisfied, it had me take the helmet off and wished me well.

Anderson was waiting by the maglev trolley outside the store. With the exoskeleton powered up, I didn’t feel like I was carrying someone on my back, though I still felt the higher gravity pulling my innards down.

“It fit well?” he asked.

“It’s pretty bulky, for a skinsuit.” I replied.

“You did some work on Washington’s moons.” he said as we climbed back aboard the trolley. “It’s very cold there—wouldn’t you need the same type of suit?”

“Not really. Vacuum is actually a good insulator. Plus, it’s easier to generate heat when you need it than to get rid of it when you have too much of it—the laws of entropy and all that.”

“I suppose.” He replied.

“So what’s on my to-do list?”

He handed me a computer slate. “Sector Green-Three got hit hard. A thirty-meter fissure opened up and damn near swallowed their chomper. We’ll be sending you to their outpost first—it’s two thousand kilometers east down the equatorial maglev line.”

The slate had a file open with a laundry list of things that were now in need of repair. I rolled it up and stuck it in one of my suit’s pouches to read on the ride there.

The maglev station was at the other end of the tunnel. Anderson wished me good luck, gave me his contact information, and departed.

At least a hundred people were waiting for the train, some of them with hand-lifts full of cargo pallets—repair supplies they’d bought right off the shuttle.

Heeding the advice on a nearby sign, I went over to one of the counters and got an armored, pressurized container for my luggage, because I doubted it would stand up to raw sunlight and 600 Kelvin heat. It looked heavy, but thanks to the exoskeleton I could carry it with one arm.

At last, the maglev came. We rode an elevator up to the surface, twenty at a time. The equatorial track sat atop the Planetary Accelerator, a fifty meter diameter linear accelerator that ran clear around the planet’s equator. It wasn’t as expensive to build as you might think—the planet is mostly iron, and robots and self-replicating nanites did most of the work. Unfortunately, a side-effect of speeding up the planet’s rotation was earthquakes—a planet is essentially a liquid blob of matter with no surface tension, floating in space. Brobdingnag used to be spherical, but as it was spun up it gradually took on a flattened oval shape—*oblate spheroid* was the mathematical name. When you change the *shape* of a planet, you can bet there will be earthquakes, and big ones at that.

When the train finally reached my stop, the number of passengers on board had dwindled by half. A pressurized tube leading to an elevator docked to the train, and I rode that down into another terminal.

The terminal was tiny and completely deserted, save for a little cleaning robot pattering across the floor. I put my helmet on, walked up the ramp to the airlock, and cycled through it.

The surface was magnificent desolation. Smooth iron, with some patches of windblown eroded iron filings here and there. There were a few craters (which looked like the aftermath of firing a railgun bullet into a piece of metal, right down to the sharp edges), and range of rounded iron mountains off in the distance.

The sky was black and starless—the atmosphere was too thin to be visible as anything but a faint white haze at the horizon. The sun hung huge in the sky, and below it was Gulliver, with the fuzzy blue halo of an atmosphere around it. Maybe someday

they'll terraform Brob too, but Gulliver was hard enough—they had to build a huge translucent sunshade to cool the moon off.

I'd seen another maglev track as the equatorial train pulled in; one of the ones that ran up north all the way to the pole. A train car was sitting on it, with a man standing outside, wearing an armored field suit and a tool belt around his waist. When he saw me, he waved and gestured for me to come over.

Once I reached him, he tapped the control panel on his wrist and held up three fingers. I switched to channel 3 on my radio.

“Are you Miss Winters?” he asked.

“Call me Jasmine. Are you from the Green-Three outpost?”

“I am indeed. Jon Rojek, at your service!” He grabbed my luggage and tossed it into the maglev car's unpressurized cargo trunk, then turned back to me. “Um, your pocket is...dripping.”

Black goo was dripping out of the pouch I had on my field suit belt.

“Shit! I forgot about the computer slate!” I opened the pouch and took it out. It came apart in my hand; a sticky mass of goop the consistency of thick gravy. It figures; the poor slate wasn't designed for such absurdly high temperatures.

I flung the biggest clod of melted slate gravy to the ground, it splattered and left a vague rectangular outline with a few chunks missing. I unclipped the pouch and emptied the rest of it out, then climbed into the train's cabin with Jon.

The cabin was too small for an airlock, so Jon started the train and we flew noiselessly above the track for maybe half an hour, until the life support had brought down the interior temperature and pumped in fresh air. I popped off my helmet.

“So you're one of those genetically-engineered people?” Jon said, indicating my tail once he had his helmet off.

“Yep.”

“What brings you all the way to Delta Pavonis?”

“Well, I was born on Phaeton, but when I was five my family emigrated to Columbia—they were on the team that built the first gamma-ray sails.”

The sun set as we rode the maglev (Brob's day is only 2 hours long), and the temperature dropped like a rock until it was scraping against negative one hundred Kelvin.

The Green-Three mining base was about 10 degrees north of the equator, all told we reached it in about an hour. Save for untouched land around the maglev track and

the base itself, the ground as far as the eye could see was chewed up, with endless parallel lines of angry gouges scored into it by a mining chomper.

The only outward evidence of the base was a reflective-foil shed with a nuclear drill parked inside, reactor compartment open and empty, and an antenna sticking out of the ground next to a ramp leading down. At the bottom of the ramp, ten meters underground, was a heavy-looking airlock door. We cycled through it, and were in.

The base itself was one long hallway with airlocks at either end, and rooms lining both sides. A door on the left slid open, and out rolled a man sitting in an office chair, extra-large computer slate in his lap.

“You’re the person Corporate sent?” he asked as soon as I had my helmet off.

“Yes I am.” I replied. “Jasmine Winters. Don’t try to shake my hand; my gloves are so cold you’d freeze your skin off.”

“Right. Anyways, I’m Ben Marksky, chomper driver. That is, if we had a working chomper.”

“Hopefully I’ll be able to fix that. What’s the damage, exactly?”

“Come in, I’ll show you.”

I followed him as he rolled his chair back into the room. It was hexagonal in shape, the walls littered with display screens, buttons, and readouts. Most of the displays were blank or displayed something to the effect of No Signal. Pulling out a keyboard, Ben typed in a few commands and a large display turned on. It was a camera, showing a view of the magnificent desolation outside. The horizon was slanted at a good thirty-degree angle.

I soon saw why.

“When the Big One hit, this huge fissure here opened right up. Damn near swallowed the chomper rig whole!”

The camera was mounted on a pylon atop the chomper; he panned it around so I could take stock of the situation. The quad-tracked behemoth mining rig had tilted forward into a huge fissure—at least a kilometer long and a good thirty meters wide. It stuck half in and half out, tail end pointed to the sky and chomping head presumably wrecked.

“The computer scrambled the atomic reactors as soon as it felt the rig tipping down.” Ben said. “We’ll have to restart those before we can move this thing.”

“Are the tracks still good? From the looks of that we’ll need another chomper to tow it out from behind.”

“We don’t have another one, and no one can spare anything big enough to pull it out, at least not for a few months. But we did think of one idea.”

“Oh?”

“We have a few industrial-strength winches in the shed. Anchor those down with the strongest stakes we have, and run cables to the chomper’s rear end. If we can get enough force, we should be able to pull the back end down and level it out. The tracks are good enough we could back it away from the chasm. Once we get the reactors back on, of course. Armand and Lester are out there right now getting the stakes in.”

He swung the camera around to look behind the chomper. A pressurized rover—a Turtle by the looks of it—was parked next to a line of four stakes sticking out of the iron ground.

“There they are.” Ben said, pointing out two diminutive figures walking around a trailer attached to the boxy rover.

“What’s that in the trailer?” I asked. It looked like a reflective cylinder, with rounded ends, perhaps a meter long.

“Dunno. Probably a part that needs fixing.”

Ben shut off the camera once the two men on the screen had climbed into the rover and started off back for the base.

“They’ll be back in about half an hour or so.” Ben said. “Want me to show you around?”

“Sure.”

Across from the control room was a dining room and kitchen, connected to a carpeted living room with wood-paneled walls, a bookshelf, and wraparound threevee screen. On the other side of the main hallway was a workshop stocked with machines and spare parts. My room was down near the second airlock and contained a bed, dresser and storage lockers, desk, and cramped but fully functional washroom. Since there were only four rooms in the base, Ben would be sleeping on the couch in the living room for the duration of my stay.

My temporary room had a safe mounted in one of the lockers; I unpacked all my confidential stuff—corporate policy manuals, contractor agreement, etc., and locked it up with a press of my thumb on the DNA scanner pad.

Armand Rahpson and Lester Malloy, the base’s other two crewmen, returned shortly after I was unpacked. As soon as I heard them banging something around inside the airlock, I knew something was up.

“Guys!” Lester came bursting out the airlock “You’ll never believe what we found!”

It took both of them, exoskeletons powered up, to carry it: the cylinder Ben and I had seen in the trailer of their Turtle. It was a meter long and about thirty centimeters wide, reflective with rounded ends.

“Let’s get it into the workshop.” Rhapsom said.

“We found it sticking out of the chasm walls.” Malloy excitedly said as they heaved the cylinder up on the workshop table. “It was maybe ten meters down, sticking halfway out. Almost missed it.”

“*What* exactly is it?” I asked. “It’s too uniform in shape to be an iron crystal. Could it be something another mining crew left behind?”

“Before that fissure opened up, this thing was buried in solid iron, in an area never touched before, at least not by us. I think you know what this means.”

“I don’t see how anything like this can form naturally.” I added in agreement.

Our suspicion it was an alien artifact was confirmed when we put it under a mass spectrometer. Result? It was composed of *pure neutrons*, packed into an unbelievably dense material.

“First off, this shouldn’t be possible.” I said once I saw the result. “Neutron-degenerate matter is only stable under the pressures found in neutron stars.”

“Maybe *they* found some way to stabilize it?” Ben offered. “I mean, the fact that *they* could even get this stuff in the first place shows *they* were way more advanced than us, or any of the other aliens we know of.”

“Maybe.” I replied. “And secondly, this—*thing*—must be hollow, with incredibly thin walls. Else it’d be so dense it would sink right through the ground all the way to the planet’s core, or at the very least be far too heavy to lift.”

We had weighed it before; it massed maybe a hundred kilograms.

“How old is it?” Jon asked.

“I don’t know. The surface hasn’t changed much since Brob was the core of a gas giant, before the atmosphere got blown off. I’d say millions of years, at least. Maybe longer.”

“If it’s hollow, is there any way we can open it up?”

Rhapsom chuckled.

“We might not want to do that.” He said.

“Besides, it’s so dense nothing we have could even scratch it.” I added. “I suppose hitting it with anti-neutrons might do something, but you’d need a ridiculous amount of them, since this thing’s so dense. The neutrons it’s made of are packed so close together they’re almost touching.”

There wasn't much conversation at dinner that evening. Ben had sent word of our finding to the main town, and they would be sending an automated maglev train to pick it up in sixteen hours.

As I was getting ready for bed, I heard someone knocking on my door.

I opened it to see Ben.

"I found this in the hallway." He held up my Columbian Resources policy handbook, with the word CONFIDENTIAL printed down the side in bold red letters. "You must've dropped it."

"You're sure that's mine?" I took it and looked at the ID number on the back. It was mine. "I put this in the safe."

I slid the door open all the way and went over to the locker with the safe, with Ben following me. I knelt down and put my thumb on the scanner pad.

"I left all my important stuff in here..." Sure enough, when I opened up the safe, all the other documents were in there, save for the policy handbook. But I was certain I'd left in there... "Anyways, thanks. Maybe it fell out of my bag or something."

"Probably." Ben replied, and left.

That night, I awoke to a tremendous metallic crash from somewhere down the hall, like something heavy had just fallen over.

Throwing on something a bit more modest, I pressed the door-button and found Rojek, Malloy, and Rahpson stepping out into the hallway.

Ben poked his head out from the living room.

"What was that?" he asked.

"Sounded like it came from the workshop." Rahpson replied.

Before we even entered the shop, we could see the table—the one we'd put the cylinder on—lying on its side, portable mass spectrometer and various tools littering the floor. From somewhere in the room, we heard a rattling sound.

Lying in the middle of the floor was the cylinder.

And it was moving. Rattling around, rolling a few inches every so often, and spinning to point in random directions.

I turned to the four men.

"Okay, we need to get this thing out of here right—"

I stopped when I saw Ben's face turn white as a sheet, and he pointed behind me. Turning around, I instinctively took a step backwards.

Hovering in the air above the cylinder, halfway between the floor and ceiling, was a blue glowing sphere, maybe twenty centimeters across.

Suddenly, five more spheres appeared surrounding it. Emerging out of thin air as points, then grew until they were as big as the glowing one, and started slowly revolving around it. These spheres were a kind of blackish-grey color, and had a texture looking like scales or leather.

One sphere exploded outward into a dozen smaller ones, and another erupted into a mass of writhing tendrils. The tendrils had no rhyme or reason to their appearance; they appeared and disappeared from nowhere just like the spheres, expanding and contracting in length, and weren't even attached to anything—they had tapered ends.

No one could have stumbled out of that room faster than we did. Once we were out, Malloy hit the button next to the doorway, and it slid shut.

That was when he vanished.

He had turned around, was opening his mouth to say something—and then was gone!

A loud *bang* resounded through the hallway, and we fell forward into the space he had been occupying, as the air rushed in to fill it.

"Suit's on, we're evacuating!" Rahpson ordered.

No time was wasted with checklists. We got to the airlock and wiggled into our field suits in what was probably record timing.

"Everyone buttoned up?" Rahpson asked.

When we assented, he depressurized the lock and swung the outer door open.

It was daytime outside; sunlight poured down the ramp to the base.

And in the center of the ramp, hovering a meter off the ground, was a translucent navy blue sphere, with a smaller solid black sphere inside it.

"Shit!" Rahpson shouted over the radio, pulling the door shut.

"What do we do?" Jon asked.

"The other airlock?" I suggested.

"Stand clear of the inner door; we ain't got time to repressurize." Rahpson said, flipping open a cover on the wall which protected a red button, and pushed it.

Override activated, the inner door slid open, and we were knocked backwards as the base's air filled the lock. We rushed back into the hallway, and saw Malloy's body lying on the floor.

"*How...*" Several people stuttered the word out all at once.

His skin was utterly white and colorless, his eyes were red and crusted over with something, and his mouth was wide open, as if he had died screaming in terror.

Or gasping for air? His eyes were covered in a thin layer of ice.

I knelt down and brushed his left eye. The ice came off in one solid flake. The eye underneath was bloodshot.

"Vacuum exposure." I said.

"*What?*" Rahpson asked.

"That's what killed him. In vacuum, his eyeballs would freeze over and the blood vessels inside them would rupture. Any more than a minute in hard vacuum is irreversible death."

The only good news was he didn't suffer long; the average person exposed to vacuum will remain conscious for fourteen seconds, give or take.

"Yes, but *how did he get outside?*"

"And it's daytime out there." Rojek said. "Under that sunlight without a suit, he should look like a barbecued chicken, not a frozen snowman!"

"Never mind that!" Jon said. "We've got to get out of here! Where's Armand?"

Rahpson came out of the living room, a flare gun in his hand.

"Good thinking," Jon said "we might need that."

Rahpson smiled, and pointed it at him.

"Have you gone mad?!"

This was no cheap firework-launcher like they give to tourist boaters on Amphibian-World. A professional-grade flare gun will melt right through an armored field suit, and it's so bright you'll have to get replacement eyes if you look directly at it without protection.

"We're letting *it* out." Rahpson said.

"*It?*" Ben asked, staring at the gun and gulping.

Rahpson gestured to the sealed workshop door with the flare gun.

"It. The creature. The thing inside the cylinder we found."

“But—it’s not inside anymore! It’s out; we’ve *got* to get out of here!”

“Jasmine.” Ignoring Ben’s pleas, Rhapsom turned to point the gun at me. “You said hitting the cylinder with antimatter could open it up?”

I swallowed hard and replied:

“You’d need a hell of a lot of it. That thing’s pure neutronium, the densest substance known to exist.”

“How much?”

“I don’t know. Even if you got enough, all you’d do would be drill a small hole in it. Not nearly enough to let this...*monster* out.”

“But when you said it can’t be stable outside of a neutron star, he” —Rhapsom waved the gun at Ben— “said it had to have been stabilized in some way. Is there any truth to that?”

“There must be.”

“And might there be some way of destabilizing it?”

“I don’t know! I suppose a sufficient amount of antimatter might do something. If it did destabilize, it would probably explode. Neutrons aren’t meant to be packed that close together under anything but exotic conditions; they’d try to explode outward from mutual repulsion. Not to mention the problem of actually getting antimatter in the first place.”

“I know where we can find some.” Rhapsom said.

“Armand, what’s gotten into you, man?!” Rojek exclaimed. “Just put the gun down”

He started walking towards him.

“You know what, Jon? I’ve never really liked you.”

He raised the gun, and Rojek turned to run.

That only made his death worse.

On the back of his field suit, between the shoulder blades, was a carolinium nuclear battery, just like on mine. Carolinium—element 126—is below plutonium on the periodic table, and thus shares most of its properties. One of the lesser-known facts about plutonium is it’s highly flammable, easily prone to igniting in Earth-type air, especially if there’s moisture for it to react with. Carolinium is even more reactive, hence why it’s usually sealed in a protective container right after it’s synthesized.

Unfortunately, whoever designed the containment vessels in field suit nuclear batteries never thought they would get hit by a flare.

When Rahpson fired the gun, it was like a miniature supernova went off. My suit visor polarized immediately, and I ducked and fell to the floor.

The rocket-propelled flare struck Rojek's suit right at the bottom end of his nuclear battery. It melted through the casing almost immediately, and the radiant heat burst his air tanks, spraying out pure oxygen. The carolinium nuclear fuel, heated from the flare rocket and sprayed with oxygen, combusted and exploded out of its casing. Radioactive bits flew through the air, and the remaining carolinium melted through his suit and into his body.

He screamed the worst scream I've ever heard. My hands flew up to my ears, only to be blocked by my helmet. I did not think to turn the radio off until after he fell down dead, a hole burned right through his body. The flare, lying on the ground next to him, was too bright to look at.

"Hope you're not too keen on having children." Rahpson calmly said, tossing the spent flare cartridge to the floor and loading in a new one.

On the other side of the hall, Ben clawed at his faceplate and waved his hands in front of it.

"I can't see!" he shouted over the radio.

"Get up, both of you!" Rahpson barked, punching the button to open the workshop door. The mirrorlike cylinder was sitting right behind it, having moved from where we left it.

Not a cylinder. A coffin.

Rahpson bound our hands behind our backs with diamond-fiber rope, hoisted the cylinder onto a utility cart with the help of his exoskeleton, and shoved us towards the airlock, around Rojek's charred remains.

"I got a bag of flare shots on me." He warned us as we stared up the ramp to the surface. "You try anything, and you'll end up like Jon. Now get over there!"

He tied us to the radio antenna; a pole sticking up from the underground base.

"Maglev stops here in about two hours; hope you have enough oxygen."

He left us, walking behind me and out of sight, perhaps going to the surface shed.

We sat in silence for maybe fifteen minutes, though it felt longer. There was nothing to do but look out at the sun hanging huge in the sky, and iron filing dunes scattered across the surface. A wispy white cloud blew overhead.

Presently, Ben said,

"I can see again! Nothing too good, just light and general shapes."

“Well, at least now we know you’d didn’t burn out your retinas looking at the flare.” I replied, then wiggled my hand around until I could poke him in the back with two fingers.

He got the message once I tugged on his suit’s wristpad.

“Seems like you guys usually stay on channel three.” I said. “Hopefully Rahpson won’t think to listen in. I think I figured it out.”

“Figured what out?” Ben asked.

“The monster—that thing in the coffin.”

“Coffin? What coffin?”

“That’s what the cylinder was. Someone must’ve shut the monster inside it, then dumped it here.”

“But it’s not in the cylinder anymore! It must’ve gotten out somehow!”

“The monster is four-dimensional.”

“*What?*”

“That’s how it can do the things we saw: make people disappear, reach its limbs outside even though it was locked up in the workshop.”

I took his failure to respond as a sign he didn’t understand.

“Okay, think of it this way. Imagine a sheet of paper as a two-dimensional universe, with length and width but no height.”

“Alright.”

“Now imagine a safe in that universe. A two-dimensional safe would be just an enclosed square, with a door on one side. Any two-dimensional creatures living in that universe can’t get into the safe without opening it up. But as for us, we can just reach in through the third dimension and take out whatever was inside.”

“Your book I found! It really was in the safe, and the monster—”

“Mhm. It just reached through the fourth dimension and plucked it out; though good luck trying to visualize what that looks like. Same thing with Malloy; it grabbed him and pulled him a four-dimensional distance away, out of our space. That’s why he died of vacuum exposure; the sun—being a three-dimensional object—wouldn’t shine into four-dimensional space, nor would there be air.”

“And the spheres and tendrils we saw?”

“If you stuck your finger into the two-dimensional universe, what would the people there see? Its cross-section—a circle. Scale that up a dimension, and when a four-dimensional being sticks one of its limbs into our space, it should look like a sphere. The

tendrils could be the four-dimensional version of tentacles.” I paused for a moment. “You know, I just had the craziest idea.”

“What?”

“Ghost stories on old Earth; lots of times one of the things people reported seeing were glowing spheres, hovering in midair. Sometimes there were rumors of objects disappearing, or being found in strange places, like they just appeared out of nowhere. Maybe there was some truth to those rumors after all, and there’s more of these creatures lurking around on various planets. Maybe whoever locked up this thing did so because it was doing something like that.”

“But if I’m understanding this right, a four-dimensional creature in a three-dimensional object would be like one of us standing in a two-dimensional shape. We could step right out.”

“What if, when you stuck your hand into the two-dimensional universe, the inhabitants speared it to a wall? You’d think you could just pull it out unharmed through the third dimension, but what if the two-dimensional universe has some very small, but non-zero, height. Your hand would be stuck, pinned to a 2-D wall until you freed it.”

“So our universe might have some very small fourth-dimensionality to it?”

“Exactly. Maybe that’s why the aliens used neutronium to lock the monster up; the effect might be greater with a denser material. Obviously the entire creature isn’t in there; they must’ve locked up some vital component it couldn’t just cut off, like its brain. So it’s been stuck here for God-knows-how-long, unable to do anything but wiggle around.”

“How long, exactly?”

“Well, Brobdingnag is a chthonian planet; it used to be the core of a gas giant, before it wandered too close to the sun and had the atmosphere blown off. There’s no volcanic activity here, so the only way the coffin could have ended up underground would be if it were thrown into the planet while it was still a gas giant, when the core was still growing—the cores of terrestrial planets like Columbia grow very slowly, and I think gas giant cores do too. And unless I’m mistaken, Brob had its atmosphere blown off over a billion years ago. My God—if it’s intelligent...”

“I don’t think I’d be intelligent after being locked up for a billion years.”

Looking up, I saw the maglev had arrived while we were talking; a pressurized cargo car and an empty flatbed. Rahpson was at the door of the cargo car, hefting the coffin inside.

“Nice talk, you two.” He said on channel two as he walked over to us. When he approached, Ben stood up and tried to kick him in the groin.

Rahpson brandished the flare gun.

“Do that again and I’ll rip out your air tank. No—your coolant tank. I’ll let you roast like a turkey in a slow cooker.”

“Did it get in your head somehow?” Ben asked. “Is it controlling you—the monster, that is.”

“It showed me things; I can’t explain any more than that.” He untied us from the radio antenna and pushed us towards the maglev, some hundred-odd meters away. “Thank you for your insights, Jasmine, it’s really helped me understand this thing.”

“The situation we’re in, or the monster?”

“Both.”

The cargo car was divided into two sections, a control cabin and a cargo compartment separated by a heavy metal door. Rahpson opened the cargo room door once the cabin had repressurized and shoved us in there, then lashed us to a cube-shaped container full of water.

The train started moving.

“Which way are we going?” Ben asked.

“I think the train was coming from the north. My suit’s compass says we’re going back that way. What’s up north?”

“There’s five maglev lines in each hemisphere, starting at the equatorial line and meeting up at both poles. There’s a big factory at the north pole; I think they use antimatter to catalyze—*oh, shit.*”

“How much antimatter do they have?”

“Three grams.” Ben replied. “I remember because they increased it from two grams a year ago, and there was a big shitshow on the news. People were worried they might lose containment in a big earthquake.”

“What do they use it for? You stopped before you could say.”

“Catalyzing the production of carolinium; using antimatter makes it much faster somehow.”

“So they’ll probably have a large armored chamber, with a spot for a transmutation target and an antimatter injector pointed at that.”

With the faint *pop* of displaced air, the translucent sphere appeared, floating in front of our faces.

An eye? It would make sense. The outer translucent sphere could be the cornea, with the jet black inner sphere being an iris—or a three-dimensional slice of one, at least. With a four-dimensional eye, the monster would be able to see everything inside

the maglev car at once, including the control cabin on the other side of the wall, similar to a three-dimensional person looking down on a 2-D universe from above.

The eye moved back and forth slowly, as if examining us. Then it contracted to a point and vanished, as its owner pulled it out of our space.

To save the drain on my air tank, I took off my helmet.

No one said anything for the remainder of the ride, but I could feel the gravity increasing. Moving up away from the equator, we lost most of the gravity-reducing centrifugal force coming from the planet's fast rotation.

Finally, after what felt like endless hours, we were there.

The door to the cargo room swung open, and Rahpson cut us loose from the water container and hauled us forward.

"Helmets on." He said as he twisted the valve to depressurize the cabin.

Outside the cabin's front window, I could see a boxy factory off in the distance, shrouded in silver reflective foil to keep the temperature down—it was summer on Brobdingnag, and its axial tilt put the north pole in permanent sunlight.

In front of that was the unmistakable pointy shape of a spacecraft, sitting on its landing legs and pointed to the sky. Its hull was ringed with auxiliary fuel tanks—with what felt like three gravities up here, it must take a bloody lot of propellant to land or lift off.

Rahpson forced us out the door first, then followed us carrying the coffin on his shoulder with one hand, flare gun in the other.

Standing beside the spaceship, between us at the end of the maglev track and the carolinium plant beyond, were six armed men, dressed in military-grade powered armor suits, wielding laser rifles.

An authoritative voice came over my radio's emergency channel:

"Armand Rahpson, this is Major Iverson of the Columbian Space Force! Release your hostages!"

Presumably, Rahpson's slaughter of Rojek had tripped a radiation alarm at the base, and the ship had been sent to meet up with the maglev when it reached the pole.

The soldiers advanced closer, then suddenly the lead man dropped his rifle, hands flying up to his helmet.

The helmet bent outwards like something inside was swelling up, then it exploded in a shower of gore, titanium, and diamond-glass shards.

Where the man's head used to be, there was now a scaly grey sphere. The creature had pressed one of its limbs into his head, displacing it and pushing it outward like so much air.

The President's Patriotic Forces ran, and I don't blame them. I would have.

Two men disappeared instantly, just like Malloy.

One of the ship's auxiliary tanks burst, wall displaced open by an expanding sphere. Liquid hydrogen spilled out and covered the ground, bubbling angrily as it boiled under the hot sun. It did not instantly boil away, instead it floated isolated from the iron ground on a layer of hydrogen gas—the bottom layer of the liquid, vaporized upon touching the ground.

A mass of writhing tendrils seized another man, who fell face-first into the supercooled liquid, lifted him up and smashed him against the side of the ship. His faceplate, weakened from thermal shock, shattered.

Leaving him to fall down and breathe air so thin as to be vacuum, the tendrils descended upon the remaining two men, grabbed them, and were gone.

In the commotion, Ben made a break for it, ducking around behind the maglev car. Rahpson fired a flare at him. It missed, bouncing off the car's side and falling to the ground to melt itself into pool of molten iron.

"I don't need him." Rahpson said, reloading the gun and grabbing my arm. "But I do need you."

He pulled me along behind him, feet splashing through the hydrogen as nonchalantly as a puddle of water, and the monster's coffin on his shoulder.

Something pulled at my ankle.

I turned around and saw the soldier whose faceplate had been shattered, lying on the ground. His face was so sunburned as to not be human anymore, and I was pretty sure his eyeballs had melted. He reached a hand up to me, but Rahpson jerked me away.

"Leave him!" he barked.

When we cycled through the factory airlock, no one was inside, and red alarm lights were blinking on the wall. The Space Force must have had the staff evacuate, maybe by one of the other maglev lines.

Rahpson scanned a map on the wall, then led me down a series of twisting metal-walled hallways. We passed a cafeteria, various laboratories, and a large storage room with racks and racks of carolinium slugs sealed in reaction-suppressing storage capsules.

We came to a door so thick it could have come from a Cold War-era government bunker on Earth, which led into a small room. At one end was a target holder built into

the wall, with a target loaded in for transmutation. Rahpson pulled the slug and its holding apparatus out, then slid the monster's coffin into the holder in its place. It was just narrow enough to fit. Across the room was the pointy nozzle of the antimatter injector, aimed at the target holder.

With the coffin secured, he led me up to the control room, which looked into the firing chamber through two meters of lead glass.

“Get the injector ready to fire.” Rahpson ordered, pushing me to the controls.

“No. This thing was locked up for a reason; I'm not letting it out.”

I braced myself for him to press the gun into my back, but he did not.

The eye appeared in front of me, and the creature reached into my brain.

It was easy after all, just as easy as taking something from a locked safe without opening it. I don't know how it did it, but I felt what it felt. Maybe it played with my emotions, maybe it stimulated my brain with electrical impulses, I don't know.

It had been trapped for a long time, conscious for every minute of it. I felt the mind of a being driven so mad that it would do anything—even kill—for the slightest chance at freedom. I got the distinct feeling it was deliberately holding back, which sent chills down my spine, all the way to the tip of my tail. This being had, after all, driven Rahpson to psycho-killer madness by sharing the same feelings with him.

Suddenly, I could not feel it any more.

“Alright.” I looked around the room, coming back to my senses. I didn't view the monster as an evil being any more, just something that didn't really know what it was doing. I leafed through a nearby technical manual and found the automatic startup button for the carolinium transmutator. All I had to do was confirm a non-standard target and enter a countdown time.

I entered ten minutes, and set a timer on my suit's wristpad for the same amount of time.

“If the neutronium destabilizes, the yield for the explosion will be huge.” I said. “Megatons, probably. Plus the rest of the antimatter in containment, when the explosion releases it.”

But Rahpson was not behind me. I looked around, then saw movement inside the firing chamber. He had stepped inside, and closed the door behind him.

“Start the timer.” He said. “And run.”

I pressed the appropriate button with the tip of my finger, standing as close to the door as possible. Then I was out the room and peeling through the hallways as fast as I could run in three gees.

“Ben! Ben! Are you there?” I called over the radio.

“Yes Jasmine! I’m at the maglev!”

“I’m coming to you! We’ve got exactly ten minutes to get out of here before this whole place explodes!”

Ben was standing in the maglev door when I got outside; he pulled me up and in and slammed the door shut.

“Okay, throttle...” I looked around the control panel. “Here.”

I put the maglev in reverse and pushed the throttle all the way up to the red line. We started heading south.

“Seven minutes left.” I twisted open the valves to repressurize the cabin. Once that was done, I opened the door to the cargo compartment. “Ben, help me get these water containers against the forward bulkhead. We need all the radiation protection we can get.”

It was hard work even with the exoskeletons, but we got them lined up so that when we sat down behind them, they would be between us and the explosion, shielding us from some of the radiation flux. That is, if the neutronium actually destabilized.

With one minute left, I went forward and cut the throttle, then applied the brakes.

“Why are we stopping?” Ben asked nervously.

“Trust me, we don’t want to be thrown from the tracks while cruising at 1200 kilometers per hour. We’ve already gone a nice distance; the factory is below the horizon.”

Thirty seconds...

I went back and sat down next to Ben.

“Draw your arms and legs in and curl up like this. The shockwave will knock us around, but our suits will protect us. If you go flying, don’t stick out your arm—you might break it.”

Six seconds.

5

4

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1

The windows blazed white.

We waited in silence for the supersonic shockwave to hit us. It did so after a full minute, with a wrenching impact that slammed us backwards into the water containers and sent other small pieces of cargo flying at us. The cargo car and flatbed went flying from the tracks, rolling over twice before skidding to a stop on their sides.

The rescue crews reached us perhaps three hours later. I don't remember much after they cut into the ruined maglev car and got us out; the first thing they did once they had me inside their pressurized ambulance lander was slap a neural suppressor on my forehead. They kept me knocked out for a few days while they gave me enough trauma blunters to make a nuclear war feel like a drunken argument.

But I do remember one thing.

Before I left (contract cancelled for medical concerns, plus the Columbian Space Forces wanted to do a full debriefing), I took a look at the itinerary of repair jobs, and one in particular stood out.

It had been posted by a worker in the Red-Two platinum-refining outpost, and detailed a problem with one of his base's air conditioners.

His complaint?

The compressor had vanished from inside its housing.