

XENOTROPH

by
Vincent Riddle

T MINUS 4 HOURS AND 1 MINUTE

The force field collapses, and we run.

My first thought is to sprint into the hills, but a boy in front abruptly stops at the top of a rise, and a spinning cloud of reddish sand envelops him, stripping flesh from bones.

Upon seeing this, the crew bolts into a forest of giant ferns, and I might have chased them had I not glimpsed the crimson flash of something lurking beneath the fronds.

I should feel remorse for the dead boy, Santos—remorse because I stole his brother's ride to this planet. But Santos was the one who discovered me in the cryo tank when we arrived, yanking me out too quickly, hurting me, screaming curses and spittle into my face. He deserved punishment.

I have mere seconds to decide, so I turn in the opposite direction, where barren plains provide no cover. I'm out in the open, exposed and vulnerable, feeling eyes on me, or predators swooping out of the sky, and I second-guess my hasty choice. This path is a mistake. I should have followed the others into the ferns.

But I dare not go back. Unlike the dense forest or steep hills, the flat ground gives me a chance to sprint at top speed. I look neither left nor right. I see an object in the distance and make that my goal.

A high-pitched wail, like angry fingernails on a chalkboard, squeals behind me, growing louder and louder, until I'm sure I'll be devoured. Adrenaline courses through my limbs; my bare feet find purchase on the spongy soil. I grew up on Earth as a lanky teenage boy running from street gangs, and

my legs find this planet's .78 g an easy match.

The object turns out to be another corroded metal frame, cube-shaped, open on all sides and to the sky. It maintains a shimmering force field, but as I approach, the field flickers off, and I dive across the threshold.

Exhausted, I turn to face my enemy, but the field powers up, faintly at first, then strong enough to bend the light like a sheen of clear water.

A spinning creature that looks like a dust devil pulls up short, pauses a second, and...*dissipates*. Whatever body the lifeform possessed is now a cloud of reddish pieces falling to the ground.

Deep Storage Loop: Memory 1.35.004.79x...

Qingshan Lin opened her eyes, raised her cheek off the rough ground, and tried to sit up. The box of samples lay next to her, scuffed up but unbroken. As the dizziness subsided, her vision righted itself, permitting her to rise to her knees and collect her bearings. Had she passed out?

She was out in the open near an active nest. Farther down the slope, stone slabs of granite baking in the sun were blanketed in red and black. A few breeders hummed over her, some coming quite close, but none landed on her. Most had congregated upon the remains of a body a few paces up the slope. The body was unrecognizable, but she had no doubt it was Sofia, who had come to rescue her.

I should be dead, she thought. Why did the swarm leave me unharmed?

Qingshan clutched the box of samples to her chest and climbed to her feet. The access portal was only twenty meters away, which had made this the ideal spot to bait a

nest that had settled nearby. As she stopped at the body to retrieve Sofia's memory bead, the breeders swirled away from her, returning to feed only when she began trudging back to the portal.

She didn't understand what had happened to her, but she knew answers lay in what she could discover about this fateful outing.

Sofia, your death will not be in vain.

T MINUS 3 HOURS AND 49 MINUTES

My chest heaves as I catch my breath. Oxygen levels in the atmosphere are at 17 percent—about the same as the elevation of Denver—but my lungs burn and my head hurts. Three hours out of cryo are not enough time for my body to acclimate.

I see nothing of value inside the metal frame, though this doesn't stop me from ripping up the spongy groundcover to look for something useful. Heat from the yellow-orange K2 star overhead is less intense than Sol's, yet warm enough to make me perspire.

I try to come to grips with what is going on. My plan had been to act the part of a lowly technician in the second wave of colonizers—the first wave having arrived five years earlier. But the instant the shuttle touched ground I knew something was wrong. The entire crew did. Vid scans revealed a base in ruins. No viable shelters existed, save for the strange cubed frames dotting the surface.

An ionized metallic odor comes up from the ground, smelling a bit like fired gunpowder. The soil is dark and grainy. I dig around for a weapon of some kind—anything, even just a stone to throw.

What I don't expect to find is a metal plate.

I sweep away the soil and find an edge running around the floor. In the center of the plate I uncover a recess with a handle.

Have the first colonists gone underground? That might explain the bizarre metal frames. But the energy of the force fields speaks of new tech.

The handle won't budge, but I'm desperate, almost in a panic. With a final teeth-grinding heave, I manage to rotate the handle a quarter turn.

Across the plain behind me, beyond the box frame I just left, the entrance to the shuttle is being dismantled by the wind—or rather, by tiny whirling lifeforms shredding the door of the craft, lifting twisted parts and human pilots into the sky, like a tornado sending a demolished house into the clouds. I wonder if the crew hiding in the ferns survived.

With a brilliant flash, the force field around me dies, and out of the corner of my eye I see the red grains of a spinning creature launch into the air above the spot where it had dissipated earlier.

Is this a sick game? Or punishment for stealing a rich kid's berth?

I pull on the handle with all my might, but it won't budge. A part of me expects a hatch to open magically, spilling out armed marines.

The creature comes at me, stirring up dust and gravel.

I cease pulling up on the handle and instead give it hard twist, which succeeds in rotating it another quarter turn.

First comes a sound like a vacuum seal breaking. Then the entire plate begins to rise.

I roll off and watch as a black box rises to the height of the frame. One side of it is open, revealing a hollow space within. At first I think it's a lift, but when I poke my head inside, I see no floor, only a rusty shaft disappearing into darkness.

An angry squeal rises in pitch. Grains of gravel or sand pelt my face, peeling away skin. I am surrounded. Tiny wounds prick me, deep enough to draw blood. I recall Santos's death. With no other choice remaining, I jump down the dark shaft.

Deep Storage Loop: Memory 1.35.004.80a...

As she operated the microscope implant in her right eye, Qingshan zeroed in on the sample resting on the illuminated glass plate and tried to keep her head steady. Her shakes were bad today, worse than ever before. She could barely focus on the whole specimen, let alone the razor-like mandibles.

Another soldier, she concluded. Slightly different from the last one but adapted to the same deadly task of stripping away human flesh.

The quad mandibles were nearly equal in size to the rest of its body, discounting the relatively large wings, which she had torn off for separate analysis. No wonder they finished off their prey so fast.

She leaned back, unable to control her wobbling head. *This is pointless. I'm not learning anything more than we knew decades ago.*

If only she could prove why the lifeforms had unexpectedly stopped attacking her last year, when she'd gotten caught out in the open near an active nest. It had brought her so close to a breakthrough. Her research was the best they had towards developing a permanent defense against the

swarms, but nobody was ready to believe her.

She gripped her head. Her medication wasn't working anymore. *I've run out of time. Nothing left but to make another trek to the clinic.*

Probably her last.

T MINUS 3 HOURS AND 45 MINUTES

I fall screaming in terror for what feels like ages but is likely only a few seconds before plunging into cold water. The shock almost knocks me out. On Earth, such a blind fall might have broken bones or even killed me, but here my body simply hurts from the splash. The back of my right arm throbs. Maybe it did break.

I'm too deep in this well to see more than a sliver of light from the opening above, and then all goes dark. The sensation is disorienting, frightening. I hear a voice cry out, but quickly realize it is my own involuntary gasp.

Treading water, I bump into a wall, its surface rocky near the water, like rough-cut stone, but smooth higher up. I explore left and right, hoping for a handhold, maybe the rung of a ladder, but all I find is something slimy to my left. Farther right, an alcove leads down a separate route, so I keep going, swimming in what I believe to be a deep trench.

After a time, my feet touch bottom, and I'm able to follow an incline onto dry stone or concrete.

Is this an underground shelter of the first colonists, as I originally believed? Or have I fallen into the lair of some native lifeform? Santos's brother should be

thanking me for stealing his berth and saving him from this deathtrap.

Scientists on Earth claimed life on this planet was no more advanced than a butterfly or beetle and that few real dangers existed. They convinced everyone it was the ideal location for the first colony from the Solar System, which had become too politically toxic for a wealthy class living in constant fear of upheaval and revolution. I just wanted a chance to start a new life among the privileged elite, to see what they saw.

It took three hundred years in cryo to reach this planet, too short a time for something smart to evolve here during our journey. Researchers must have missed signs of sentient life living beneath the surface.

As I crawl gingerly across the floor, shivering in the cool air, a pinpoint of light ahead catches my eye. It grows larger and larger, followed by a rushing sound. A large object approaches from a distance.

It illuminates the room, and I see for the first time that I'm in an open chamber with a concrete bench against one wall and a darkened stairway on the right. The light bears down on my location from a tunnel straight ahead.

It slows to a stop. Beneath the bright headlight, the round entrance of a barrel-shaped rail car dilates open, inviting me inside a spacious cabin lined with cushioned seats perfectly designed for a human body.

I take the first seat near the entrance, where the light is brightest. The cabin is much longer than it is wide, but the overhead lighting at the far end flickers on and off ominously, and I choose not to venture that far. A part of me expects the sound of a conductor's voice to come over an intercom, announcing the next stop. But all I hear is

the hiss of the door closing. The overheads dim to a red hue, and the car takes off.

The cracked kaleidoscope windows reveal nothing beyond them, except to convey movement with the passing of alternating white and gray. The car accelerates rapidly, and I sink into the cushions. With a pop, the cushion against my back bursts and a white powder fills the air with a sour odor, like old silicone. I cough until the cloud settles.

A sudden downward shift in momentum causes my stomach to drop, and I grab the seat in front for support. After a sharp turn, it levels off, and movement continues for a long time.

I test my throbbing arm and discover that it's not broken, only badly bruised from the fall. It has swelled rapidly, perhaps a consequence of a strong heart pumping blood in weaker gravity.

Finally, the car slows to a stop. When the door opens, I waste no time diving out.

Deep Storage Loop: Memory 1.35.004.80b...

"You don't have long to live," Dr. Arnhem told her as he shut off the scanner. "We managed to limit the spread of the infection some, but your precentral gyrus is a sponge."

Qingshan sat up. "I only need a month or two. I'm so close."

The doctor gave her a nod, but it was obvious he was distracted by other thoughts. Had she missed news of another breach? If so, the evacuation would begin soon.

"I'm afraid I can't give you that much time," he said. "The medication will keep you lucid, but you don't have more than a few days."

A few days? The evacuation won't bother with me now, even if I do find a defense against the swarms.

"I'm sorry." The doctor's focus had returned to her and he put on a sad frown. "We couldn't control the spread of the disease after the eye implant was installed. It was a freak accident."

More likely a careless surgeon who believed installing her implant at a time like this was a waste of time.

"Is there nothing we can do?" Qingshan asked. "No experimental treatment, no last-ditch effort?" She knew the doctor came from American stock, so she added, "No Hail Mary pass?"

"All we can do is place you in a cryogenic bubble with the hope it will halt the neurologic degeneration. It's a long shot and could be quite painful. I don't recommend it."

Qingshan didn't need time to think it over. "Do it," she said.

T MINUS 3 HOURS AND 17 MINUTES

I'm in another small station, smooth-walled and empty. An arched corridor lies ahead, its walls stained by years of dirty water leaking from a fracture in the ceiling. Dark pebbles cover the floor, making walking on bare feet slow and painful.

I come to a crossroads and choose the straight path, not because I fear getting lost, but because a bluish light at the far end beckons to me. Here I find double doors hanging at broken angles. Above them, glowing letters read:

INFIRMARY

I squeeze through the doors and continue down a dimly lit hallway. No sounds disturb the silence except the skittering of pebbles kicked by my toes.

I pass small rooms containing stone platforms or beds meant for resting. At the head of each bed is a darkened plate of glass. This area reminds me of one of those upper-class hospitals where each patient gets a private room and a squad of nurses.

In one of the rooms I discover the body of a woman. She rests flat on a bed, eyes closed, hands at her side. She is encased in a soft, transparent body bag, which is puffed out, as though full of air.

My heart quickens. She doesn't stir as I touch her shelter, and I deem her a deceased woman in her forties, her body preserved in a polyethylene coffin.

In her right hand she clutches a stylus shaped like a light pen. I have no way of tearing through the bag, except with my hands and teeth—which is what I use, after much effort.

The stylus has a rounded end and, to my delight, lights up when the sides are pressed. This will serve me in the dark.

With the bag torn apart, I search the body, discovering a white polyhedral marble in the woman's other hand. Despite the cold gas of the bag, her fingers are warm.

She stirs, inhaling deeply, then exhales in a spasm of coughs. I rip the bag further, freeing her head and shoulders, though the exertion costs me. I am huffing and puffing by the time she opens her eyes and emerges from her artificial womb.

As she brings her coughing under control, she reaches out to hold my bruised arm. I wince from the pain but manage to hold still.

The woman looks at me through watery eyes and says something in an unfamiliar tongue.

I shake my head. "I don't understand."

She wipes her eyes and gestures for me to take her other hand, which she uses to climb all the way out of the bag. She settles on the shelf, gripping the edge tightly, as if steadying a wave of lightheadedness.

“Who are you?” she asks in a thick accent. Her every breath sounds labored.

“Antonio,” I say. “From the *Merced*.”

This seems to puzzle her, and she frowns. “You speak only the language of administration? In which borough were you raised?”

It’s my turn to be puzzled. “You’re not from the *Esperanza*?”

Instead of answering, she begins searching the inside of the womb.

“Are you looking for this?” I ask, holding out the stylus.

Taking it from me, she touches it to the glass plate on the wall and scribbles futilely.

“The central computer must be down,” she says. “Did you also find a memory bead...a small ball?”

When I hand her the marble, she inserts it into a divot in the wall above the plate, and there it remains, as though magnetized. A holo display appears, hovering over the bed, showing numbers, charts, a model of the human body, and data foreign to me.

Pushing the bag to the floor, she returns to resting on her back. From this position she uses the stylus to manipulate the display above her. The image of the human body zooms onto her skull, specifically the brain, where it highlights several areas in red.

At last she sits up and shuts off the display. I notice a tremor in her body, as you might expect to see from someone suffering from Parkinson’s disease.

With her stare fixed on me, she tilts her head in curiosity. “How old are you?”

“Nineteen.”

“You look like you’re in your early thirties. But then, your idea of a year is different from mine, isn’t it?”

“What do you mean?”

“You’re from Earth.”

I nod, and she gives me a huge grin.

“How wonderful! It’s like meeting a mythological Atlantean.”

I shake my head in confusion. “What about you?”

“Born and raised in the Shanghai borough, far from here.”

“You didn’t arrive on the *Esperanza*?”

“Never heard of it,” she says. “Nor of your ship, the *Merced*. I must say, this is a surprising turn of events. I want to ask if you’re part of a rescue, but it’s obvious you don’t know anything about that. An independent starfaring group perhaps? Where’s the rest of your crew?”

“Probably dead,” I say. “Something on the surface attacked us when we landed.”

Her grin falters. “The red swarm.”

“A dangerous lifeform.”

“Indeed. Like droves of angry wasps, only a thousand times worse. They’re the reason we had to evacuate so many boroughs.”

I wait for her to go on. I need answers.

She nods, as though reading my mind.

“History claims they were nothing but minor pests at first, few in number, but by the time I was born, they had become a savage plague. Attempts to scorch great tracts of land made things worse, as the intense heat cracked the stony shells wherein their young lay dormant, like the seeds of pinecones popping open after a forest fire. They began to feed exclusively on Earth-based life, accelerating their reproduction. A local xenotroph: an alien eater. And we are the aliens. Whole boroughs were abandoned as swarms

found their way in. Facing extinction, we planned to abandon our underground homes and settle on a habitable planet a thousand light-years away. As you can see, I didn't get the chance to leave, and I don't know how many escaped."

"A thousand light-years? Why not return to Earth?"

"All contact was lost generations ago, after resources there dwindled and war broke out. The Council decided it was too risky. And yet here you are! Earth must have recovered."

Something doesn't add up. Could I have been in cryo longer than I thought?

"In any event," she continues, "you must find a different borough. This one has been exposed to a swarm and isn't safe. See the gravel littering the floor? Those are the pods of their young."

"You're not coming with me?"

She shakes her head. "I suffer from prion disease and won't remain conscious for more than an hour now that I've been released from coma. For unknown reasons, the disease has protected me from the swarms, but there's no cure."

"Then I've killed you."

She squeezes my hand. "It's not your fault, Antonio. By the look of things, I've been here for decades, deserted by my people. Only the infirmary's emergency reserves have kept me alive. I'm glad to wake and speak to an earthling."

Have other colonists fled down here? If so, I might not be the only survivor. The thought of the crew from the *Esperanza* taking refuge in another quarter of this underground labyrinth gives me hope.

"If I find a safe place, I'll come back for you," I say.

She smiles warmly. "If you find safe place, stay there. If you discover a way off this planet, take it."

She lies down, her whole body shaking. I move to lift her in my arms, to carry her, but she pushes me away.

"Don't waste your strength," she says. "You'll die if you take me along. Your act of charity won't help either of us. Now go and live."

I hold her hand until she closes her eyes. Thirty minutes after I leave, I realize I don't know her name.

Deep Storage Loop: Memory 1.35.004.80c...

Dr. Milo Arnhem didn't consider himself a brave man, but his sense of duty prevented him from fleeing before all his patients were out of the infirmary.

Except one: The assistant xenobiologist Qingshan Lin lay in a coma. She had claimed to be on the cusp of discovering a defense against the red swarm, but whatever it was, she was too late. He suspected her defense meant infecting everyone with a variant of the deadly protein that caused Creutzfeldt–Jakob disease, which meant she had no defense at all. She might have been onto something, as the protein appeared to be fatal to the swarm's breeders, but a safe repellent would have taken years to develop.

All they had was hours.

He was forced to leave Qingshan in a coma-like state called dry cryo. Like many of the colony's best achievements, it was born from research originally done on Earth for extended space flight. Through a combination of drugs and cold gases, the human body was tricked into behaving as though it had been frozen. Every cell went into special hibernation, preventing energy expenditure, cell reproduction, and aging. It might even

arrest Qingshan's disease for good, though he doubted it. Too bad he wouldn't be around to find out.

He followed the last of the staff members hauling medical equipment out of the infirmary and down to the inter-borough transports. Everyone was on edge, and he almost ordered them to leave the packs behind, to speed their exit. But he wouldn't put the evacuation at risk. His own pack was laden with growth stimulants that would prove invaluable in a heavier gravity.

Even though they moved at a slow pace, the staff caught up with a column of patients on gurneys and in wheelchairs. Their attendants had abandoned them when the first whistle of a swarm echoed through the hallways. Arnhem hurriedly waded through pleas of "Don't leave us" and "Tell my family I love them" as a high-pitched sound approached from his left.

At the subway station, civility gave way to pandemonium. A shuttle car had departed, abandoning hundreds to the threat. For the first few minutes, bawling humans drowned out the sounds of the swarm, but then the banshee cries closed in. As a tidal wave of people spilled down into the open tunnel, Arnhem dropped his pack. An instinct to survive overcame his sense of duty. He pushed and shoved his way to the front, knowing that the more bodies he put behind him, the more time he had to reach the terminal nexus.

An explosion ahead rocked the tunnel, shaking the floor, and he tripped over a ground rail. The lights went out.

I'm too late, he thought. The Council has barricaded the tunnel.

He tried to get back up, but the panicked crowd caught up with him, pushed him down, left him behind.

T MINUS 2 HOURS AND 9 MINUTES

Fast as I can, I pick my way through the hard pods on the floor. My only possessions are the woman's stylus and her white marble.

I pass through several doors, down hallways, through empty rooms, up stairways, down others. Outside the infirmary, it's pitch black, and if not for the stylus's light, I would have been forced to stop. I have no idea where I'm going, but I know I must find an area without pods scattered on the floor.

Eventually I reach a station, but even after fifteen minutes of patiently waiting, no car greets me. These tunnels appear to be the links between the boroughs, so I jump down into the tunnel and begin walking.

After an hour of this, I hear a rattle behind me. For a moment I think a car is coming, but the sound soon turns into a squeal I recognize. A swarm.

I begin jogging.

My experience topside taught me that I can outrun a swarm in a full-on sprint, but the floor here is uneven and thick with pods. The pain on my bare feet is intense, the going difficult. Sounds behind me grow louder.

Ahead, the way is blocked by a railcar. Halfway down the car's length, the ceiling has collapsed, filling the tunnel on either side with rocky debris. The spiral door is open partway, barely wider than my shoulders.

It's enough to squeeze through. Inside, I rush down the aisle to the crumpled middle of the car, where several benches support a narrow gap between the smashed ceiling and the floor. After crawling to the other side, I hold the stylus between my lips and jam

broken chairs, benches, and rocks into the gap, anything to seal up the way I've come.

The front of the car here is ripped open, as if cut deliberately, leaving me an easy way back into this end of the tunnel. And to my relief, the floor is mostly free of pods. I keep going until I reach the end of the line.

The woman's words confuse me, among them her claim that the evacuation had planned to take a thousand-light-year journey to another star system. A *thousand* light-years! My own journey using the latest nuclear pulse propulsion took three hundred years to cross a mere ten and a half light-years. Were the refugees planning to remain in cryo for thirty thousand years? The *Merced* would have failed long before then.

A stairway takes me to a huge concourse with exits leading off in all directions. I halt in the middle of the room, pointing my narrow beam of light to examine each hallway.

Fastened to one wall is a row of darkened glass plates of individual terminals, like those in the infirmary. Below each one is a divot, where I insert the white marble. The glass sparks to life, revealing a map.

After experimenting with my pen, I find I can move the map around and locate the destination I want: Data Warehouse. Maybe a working computer there will provide access to historical archives.

I make a mental note of the path and, retrieving the marble, take an exit. The hallway winds around for a time, skirting large areas with machinery, huge tanks, pumps, and cold furnaces. This is the kind of place I might have been assigned to work, after the crew got over the fact that I was a stowaway. The scale of this colony is huge and must have taken a century to build.

Entering a long tunnel near my destination, I spy a hand-drawn sign pointing down a direction not on any of the maps.

EVACUEES

This leads me to doors and a series of spacious rooms lined with freestanding chairs and a few tables. One of them even has a vintage game of chess on display, its last moves frozen in time. I imagine families waiting to be processed, shuffling through the same dull procedure I endured on Earth before boarding the *Merced*.

To my surprise, the floor is covered an inch deep with pods.

An exit in one of the rooms is barricaded with overturned tables. When I clear them away and open the door, I see that the pods beyond are a mix of black and red.

It's obvious how the swarm got in: through a massive, shattered window overlooking a spacious cavern. There are no human remains, but I wonder about so many pods underfoot. Did even a single person escape this colony?

The cavern is actually a huge, circular pit open to the sky far above, where sunlight pours through in a stream of yellow orange.

As my eyes adjust to the light, the contents of the pit take my breath away. In an open area across from a platform is a conical structure the size of a small building attached to rails anchored to the sides of the native rock. The pit drops away into the depths. A walkway reaches out from the platform to a closed portal in the side of the structure surrounded by a shimmering force field.

I scan the sky, listening for the screams of a swarm, then—hearing none—quickly head toward the walkway.

What I thought were red pods turn out to be the tiny creatures of a swarm. Soon

after I step into the light, they lift into the air, coalescing and moving as one, like the murmur of birds or insects.

Committed now, I race for the spacecraft, outrunning the swarm briefly until I reach the closed portal. The moment the force field senses my touch, it winks out. The swarm's outer fringes catch up to me, slice my back, begin peeling away skin. I fumble for the marble, searching for the now familiar divot in the wall of the craft.

The pain is excruciating. My eyes water, clouding my vision. Once the swarm finishes coming together, I'll be dead in seconds.

I find the divot. The portal opens and I slip through.

A handful of the biting creatures follows me inside before the force field returns and the door closes, and for a desperate moment I swat and stamp at them until they no longer fly.

The craft is packed with row after row of empty acceleration couches. I choose one in the center front, because it's larger and set forward from the others. A holo display flares up before my eyes, exposing the ship's controls. I seem to have taken the navigator's chair.

I scroll through the menu, looking for something akin to a library. A popup tells me that a storage loop is processing every memory in the central warehouse and has a probable solution for the cause of the launch delay. I marvel at the white marbles—the memory beads—which have recorded the lives of the colony's inhabitants. I cancel the loop and continue looking through the menu. It takes a while, but my search uncovers references to the launch of the *Esperanza* buried deep inside historical archives of Earth.

What I learn chills my blood. Old records referring to the *Esperanza*, the *Merced*, and the *Non-Stop* speak of betrayal. Rather than seeing the first colonists as pioneering explorers, Earth's historians portray them as the upper crust of a pompous and ungrateful class who wasted precious resources before abandoning their human family. I can identify with the historians, but what I learn next reaffirms that I should have stayed on Earth.

Resentment on Earth led to a desire to outdo the colonists' feat of engineering. Twenty years after the *Non-Stop* departed, a huge advancement in drive technology permitted a new wave of colonists to outpace all of us frozen on the three starships. The people of Earth knew we were out there, but after a generation, they hardly cared. In their view, we were on primitive paddleboats, making the slow journey across the vast ocean between stars. They covered the distances in something referred to as a freefall bubble, an exotic technology which, as far as I can tell, was inspired by speculative theories dredged up from the late twentieth century.

Their new drives gave them such a head start that they built and abandoned an entirely new civilization in the time it took the *Esperanza* to arrive. I'm not sure what happened to the crew of that first ship, but I know that five years from now, the colonists aboard the *Non-Stop* will make the same mistake the *Merced*'s crew did by going to the surface to investigate.

I should warn them.

As I play with the holo display, hunting for *Communications*, a blinking light in the lower-right corner suddenly turns red. Selecting this brings up *Terrestrial Launch Control*. A lot of unrecognizable terms confront me, but enough graphics and warnings

tell me that I kicked off a prelaunch checklist.

T MINUS 60 SECONDS

I scroll frantically through menus to halt the process, but I can't find an image resembling *abort* or *override*. I select a few potential candidates, but in doing so, I unwittingly transfer command from the borough to the ship's onboard computer. The lines of a script begin to run.

The floor shakes. As I hurry to strap myself in, my chair tilts into a position that has me staring at the nose of the spacecraft. A graphic shows the ship descending into the pit, which appears very deep.

It halts, and a ten second countdown ticks off.

Massive acceleration slams into me with the force of at least three Gs. My body pushes hard into the chair.

I squeeze my eyes shut and try not to panic. The ship is going to fall apart. I'm sure of it. No matter how advanced its construction, decades of neglect have surely fractured something vital.

The g-forces pause for a second, allowing me to catch a breath. Then engine thrust kicks in, pressing me back into the acceleration couch. I dare not peek at the display, convinced it shows the ship heading straight for a mountain. The next three minutes feel like an eternity.

Only when the pressure eases and weightlessness causes my stomach to lurch do I open my eyes. I make one last attempt to seize control of the ship, hoping to contact the *Merced* orbiting the planet, hoping to warn them, but I don't know which options to choose.

The next sensation is strangest of all. Instead of experiencing the effects of weightlessness, a feeling of falling triggers eye-rolling vertigo. I grip the armrests, fighting to keep the panic at bay. My heart is pounding, and I give in.

I lose consciousness—for how long, I don't know. When I come to, I see the holo display indicating that a freefall bubble has surrounded the ship.

I'm on a thousand light-year journey to a new colony, if such exists, and there is nothing I can do about it. I doubt even the *Merced* detected me before the drive engaged.

As I settle in for the inescapable ride, I see a few red motes circling through the cabin like a clump of annoying gnats.

A swarm.