

Warp Test

Jonathan Sladko

"*Perseverance*, this is Launch Operations Manager, the Launch Team wishes you good luck, and Godspeed."

"Thank you very much, I know it'll be a good one," Johnson grinned as she quoted Armstrong, turning to the crew. "It's traditional," she said.

Sorenson chuckled and nodded. Johnson had a flair for the dramatic, but when it came down to brass and tacks, there was no one better to be commanding the mission.

"Three minutes, thirty seconds, and counting, we're still go at this time." The voice of the Launch Ops Manager came back through their headsets.

"Initialize forward warp ring," Johnson commanded.

"Initializing forward ring, Captain." Garcia called back, as she worked diligently at her console.

"I'm getting a few strange readings in the antimatter containment, but we're still within bounds."

That was Martin, the ship's lead engineer. He had designed the *Perseverance's* warp-ring engine, alongside Dr. Brenner and Dr. Patching. Brenner was on board with them, down with the science team. Dr. Patching had stayed behind because his wife had just had a child.

Johnson glanced his way. "Define 'strange,' Martin."

Martin frowned and shook his head. "It's gone now. It was just a blip really."

Johnson raised an eyebrow, clearly interested in hearing more.

Martin continued, "It looked like our energy output was higher than anticipated. But the readings are back to normal now."

"Martin, I saw it too. Could be a faulty sensor. It didn't look like anything significant," Brenner remarked over the headsets. "Give me a couple seconds to run a quick diagnostic."

Johnson glanced at her display, then at Sorenson, sitting next to her. "We're at t-minus two minutes and forty five seconds." She turned to Robinson, who was manning the radio. "Inform Launch Ops, I want to be sure it's nothing."

Robinson nodded, quickly relaying the situation to the Launch Team. A moment later they responded, "*Perseverance*, we didn't detect the same anomaly. It could be a detection error. You're still within your launch limits either way. Continue with the test. T-minus one minute."

Johnson nodded, a faint frown still visible on her face.

"Understood, Launch Ops." She turned to Garcia and said, "Initialize aft warp ring."

"Initializing aft ring, Captain."

Sorenson eyed the panel in front of him. The large touch-screen displayed a diagram of the ship, a long and narrow shape with a large ring at either end. The forward ring had filled in blue, and the aft ring was filling. As it filled, thin green lines snaked towards the rings, condensing and passing through the forward ring, staying tightly packed and passing through the aft ring, before expanding and fading off the edge of the display.

"We have a stable warp tunnel, Captain," Sorenson announced.

"T-minus thirty seconds, *Perseverance*."

Johnson nodded, looking down at her own display, and checking a box on the check list. "Life support systems check?"

"Life support in the green, Captain," Carter called from the back of the bridge.

"Communications?"

"Loud and clear, *Perseverance*," the voice of the Launch Ops Manager rang through.

"Reactor systems check?"

"Reactor systems nominal, Captain. We're operating at twelve percent power," Martin replied.

"T-minus ten seconds."

Johnson looked around at her team, making eye contact with each of them as the final ten seconds counted down. Sorenson was at the helm and looking excited. Garcia working the reactor station; she looked calm and determined. Martin was at the engineering station, his face unreadable as usual. Robinson at communications was wearing a big goofy grin. And behind her was Carter, who was in charge of life support systems.

She relaxed her shoulders. When the countdown hit zero, she said, "Who's ready to make history?"

Sorenson grinned and nodded, "Let's do this."

"Accelerate to 1c," Johnson commanded. Sorenson slid two fingers up his display, and a faint hum from the engines became audible. The ship began to glide smoothly forward, and Johnson couldn't help but grin herself.

"Twenty-five percent power, Captain," Garcia called out.

"Roger that." Johnson nodded, eyeing her own panel. The diagram of the ship was displayed here as well, along with the warp tunnel, statistics on their energy production and usage, and brief heads-up displays of other critical systems.

"We're at .5c, Captain," Sorenson announced. He glanced over at Martin and commented, "She's running beautifully."

Johnson chuckled, "I thought we agreed, *Perseverance* is a *he*."

Sorenson rolled his eyes with a grin, "You decided! There was no agreement!"

"Fifty percent power, Captain," Garcia chimed in again.

Johnson consulted her display again, briefly estimating their speed to power consumption ratio in her head. "Martin, how's our power consumption?"

Martin shook his head, his brow furrowed slightly. "We're operating at a notably higher efficiency than I expected. The engines shouldn't be capable of pushing us much past one-and-a-quarter C, but at this rate we'd be able to press 2."

".75 C captain," Sorenson called out again. The blue filling the

rings of the ship on his display had deepened to a dark purple. It reminded him of the eggplants his mother used in eggplant parmesan.

"Martin is it just me, or is our speed increasing exponentially, and our power consumption only linearly?" Johnson asked with barely a hint of concern in her voice.

Martin nodded. "It does appear that way," his voice trailed off for a moment. "Garcia, are you getting any warnings?"

"No, all readings nominal, sir," she answered.

Johnson and Sorenson shared a look, each silently wondering if they'd be able to press past 1c.

"We're approaching .9C, Captain." Sorenson added. Martin was tapping away furiously at his console, a bead of sweat forming on his temples, and Garcia was scouring her own console for any clues.

"Alright, Sorenson, let's hold it at .95." Johnson ordered.

Sorenson nodded, sliding the throttle back down to neutral, "Alright, .95c Cap—" Sorenson trailed off, frowning at his console.

"What is it?"

"We're still accelerating. We're passing 1c now." Sorenson sounded puzzled.

Johnson trusted her helmsman, but she double-checked the throttle on her display anyways. It was, in fact, in neutral, but the ship's speed was still increasing. Now it was nearing one-and-a-quarter C. "Martin, talk to me."

"I'm at a loss, Captain. I don't understand why we're still accelerating. Our power output has stopped at about eighty percent power, and the power levels are steady." Martin wiped the bead of sweat away with the back of his hand.

Johnson looked to Robinson. "Let Houston know what's going on."

Robinson nodded, quickly explaining to Mission Control that they were accelerating beyond their target.

"Garcia, can we decrease the power available?"

She nodded. "I'll see what I can do."

The faint hum of the engines was becoming louder.

Martin grimaced as he announced, "Captain, we have some kind

of feedback loop forming. I'm not sure we'll be able to stop it."

"What do you mean, 'a feedback loop'?" Johnson inquired.

"Our energy consumption is remaining unchanged, but our velocity is exponentially increasing, and it appears to be feeding back on itself."

Johnson gritted her teeth. "In English, Martin."

"The faster we go, the faster we accelerate."

Johnson paled. "*Perseverance* isn't designed to go faster than 1.5c." She look at her screen as the engine noise became noticeably disruptive. "We're approaching 2 now."

"Should I try decelerating?" Sorenson chimed in.

Martin paused for a second before replying, "I suppose it couldn't hurt."

Sorenson nodded and eased the throttle back into the negative range. The ship began to vibrate and groan, and the green lines of spacetime on his display began to distort.

"Okay, let's not do that," Johnson commanded.

Sorenson quickly returned the throttle to neutral.

The ship continued to vibrate and groan. Johnson was reminded of the sound of wind blowing through the caves near her home in Colorado. "Martin, what is this?"

Even with the throttle in neutral, the formerly straight lines of spacetime on their displays were increasingly wavy, distorting more and more. Martin was scribbling away furiously on his own display, and shaking his head. "We might have disturbed the warp field. I think it's going to collapse."

"We are still accelerating, Captain. We're almost at 5c now."

Sorenson sounded nervous. Johnson had never heard him sound nervous when flying.

"I've lost contact with Mission Control," Robinson announced.

An alarm started blaring near Garcia's station, and she quickly added, "I'm getting a heat warning from the forward ring, Captain."

Johnson looked back at Martin, who was still working as fast as he could, and then to Carter behind him. She looked visibly frightened.

"How's our life support, Carter?"

Carter perked up and turned to her console, scanning through the readings quickly, "All readings nominal, Captain." She sounded relieved.

Johnson looked back to Sorenson again, trying to figure out another way to buy time for Martin to figure it out, but she was at a loss for words. Sorenson met her gaze for a second, before piping up, "We're approaching 10c."

Martin spoke into his headset, "Dr. Brenner, anything you can think of?"

There was a moment of silence, aside from the groans of metal and the roar of the engines, before Brenner's voice came back over the intercom, "Jettison the warp core?" He had said it more like a question than a statement, and it hung in the air for a long moment.

"Alright, do it," Johnson commanded. "Sorenson how fast will we be going in five minutes?"

Sorenson glanced over his panel briefly. "I'm not certain. More than 25c if I had to guess."

Johnson nodded, "Robinson, still no contact from Houston?"

"No, Captain. I think our speed is making communication impossible for the moment."

"Understood. In that case, I need you to estimate where we will end up after we jettison the core. Assume the exponential acceleration continues until then, and let me know what objects we'll be closest to."

Robinson nodded and got to work quickly.

Garcia was putting out literal fires with the onboard suppression system.

Carter was trying to help by redirecting O2 flow away from fires.

Martin was hard at work, chattering away about his procedures with Brenner.

Johnson looked back to Sorenson, and found him staring out the windshield with his mouth agape. "Look at the stars," he said.

She looked past him and out at the stars. They were shimmering, seeming to vibrate in place. No, they were slowly sliding towards the rear of the ship, as if someone had draped a black sheet with holes

poked in it across their windows, and was slowly pulling it towards the back.

"20c, Captain." Sorenson's alert brought her back to the moment.

"Martin, Brenner, update." She was in survival mode at this point. The ship's engines were screaming, and it was difficult to hear each other's voices outside of the headsets.

"Nearly there, Captain. I'll let you know when we're ready."

Brenner's voice was staticky and distorted, but still intelligible.

Johnson shook her head. "No, jettison the core as soon as you are able."

Martin looked surprised for a moment, but then nodded and continued working. He wasn't sure he'd be able to hear anything in a moment.

The bridge was abuzz with alerts, updates, and fervent conversation. All the while, the ship was accelerating, the engines roaring louder and the ship shaking violently.

And then it fell silent.

Johnson looked back at Martin. "It's out," he said.

She looked back at her console, the green lines of spacetime had evaporated from the display, and a small marker representing the engine core was flying ahead of the ship.

"Garcia, how are we doing?"

"We're still in one piece, Captain, but I've got damage to multiple systems, and we're venting atmosphere in—"

She stopped short, staring out the front windshield. Johnson turned to look, and saw something she couldn't comprehend for a moment. Space had stopped looking like a sheet. No, it looked like two sheets; the inner one now had a tattered, gaping hole. Strips of fabric, or rather spacetime, were fluttering in an impossible wind, and beyond the hole, unfamiliar stars speckled a purple and blue nebula.

"The core exploded," Sorenson answered her question before she could ask it.

"Martin, what's going on?"

Martin didn't reply immediately; he was also mesmerized by the

show.

As the pieces of tearing spacetime fabric reached the ship, it lurched forward. Everyone was thrown against their seatbelts and a horrible metallic tearing sound filled the cabin.

Johnson didn't know what to say, but was confident nobody would have heard her anyways once the lights went out. She held onto the console in front of her, still illuminated, as green lines rippled from the front to the back of the ship, followed by a bold red line.

She'd never seen a red line on this display in reality, only in the sim, but she knew what it meant: a break in spacetime. A tear, a wormhole. The space ahead of them was not their space. It might not even be their galaxy.

As the red line on the display moved down the length of the ship, the deafening sound of hail clattering on a metal roof filled the bridge. Outside the ship, the stars fluttered and wavered wildly before vanishing, with new ones appearing in their places.

Johnson could faintly hear Garcia yelling something about the aft ring. She looked at her, and saw her gesturing wildly at her screen. Johnson looked down at the console she was white-knuckling and saw what she assumed Garcia was trying to get across: the aft warp ring and been ripped off the ship and was no longer present on the display. Instead, there was a jagged line crossing the body of the ship about three quarters of the way to the back.

She was powerless to do anything. The console was still displaying, but none of the controls were responding. The lights in the cabin were flickering on and off, coms were down, all the crew could do was hold on and wait.

There was another deafening tearing sound, and a piece of the forward warp ring was flung at the bridge. It glanced off the front windshield, making everyone flinch away. Huge cracks in the window spiderwebbed away from the impact point, and for a moment Johnson thought for sure this was how she would die.

Then the clattering sound stopped. The stars outside settled and came to a stop as well. There was silence and darkness.

After a long moment, the lights came on, and Johnson called out, "Okay everyone, status reports."

Carter was the first to respond. "Life support to the bridge is functioning, Captain, but we only have about five and a half hours of air. The CO2 scrubbers are down."

Garcia was next. "We lost the aft warp ring entirely, and two quarters of the forward one. I've got more alerts than I could respond to in a week."

"Robinson, can we reach anyone?" Johnson asked. Robinson spoke into her headset a few times, changing a few settings before she shook her head.

"I can't reach the science team either," Martin added.

Garcia was quick to reply, "I'm not sure they made it, Captain. I'm not receiving any signals from that half of the ship. It could be a systems error, but I've got errors in just about every system we have."

Sorenson spoke up at that moment, "Captain, look." He was looking past Johnson. She turned to look out the window and was met with the sight of an enormous gas giant moving slowly passed the port side windows.

"Is that," she paused for a moment. "That's not Jupiter, is it."

Sorenson shook his head. "No. I'm not sure what star system this is. Should I put us in orbit?"

Johnson nodded. "Yes, get us into a stable orbit. That'll be one less thing to worry about." She turned back to Garcia. "What systems are working properly?"

Garcia scanned her console for a moment. "Bridge life support is functioning, minus the CO2 scrubbers. All but one of the lifeboats are reporting functional. Comms inside the ship are working, at least as far as the midship bulkhead. The bulkhead is closed. I still haven't been able to confirm anything about the science team."

The statement hung in the quiet air for several moments. Carter spoke up first. "May I remind you, Captain, that we only have a little over five hours of air. We need a plan."

Johnson looked around the cabin. Everyone looked as scared as

she felt, and she was sure they could see she was as well. She took a deep breath and faced forward in her seat, gripping the console again. "Okay. Garcia, see what systems you can get back online. Robinson, start charting the system as well as you can; start with this gas giant. Look specifically for terrestrial worlds with atmospheres. Carter, go investigate the bulkhead, and try to reach the science team. We're not giving up on them yet. Martin, assist Garcia, but focus specifically on engines. Sorenson, keep us in a stable orbit."

Everyone voiced their understanding and went to work. Carter unbuckled and left through the door at the aft of the bridge. Martin moved over to Garcia's console, and they spoke quietly about the possible repairs they could make. Robinson worked silently at her own console.

Johnson slouched a bit, realizing how tense her shoulders were. She looked out the windows again, admiring the beauty of the enormous world they were now orbiting.

"So," Sorenson paused, adjusting his controls a bit, "did we, like, tear a hole in the universe?" His voice was both bewildered and awestruck.

Johnson took a deep breath and nodded. "That would be my guess. I'm not sure how."

Sorenson shook his head. "Me neither." He adjusted the controls again. "This is a lot more difficult without all of our thrusters."

Johnson nodded, running through scenarios in her head. "I'm not sure it'll matter. Five hours of air, to fix all this?" She motioned at the ship in general. The large gas giant was now partially obscured by the spiderweb of cracks in the windscreen, and she silently thanked the intern who had suggested double-paneling the reinforced windscreens.

After nearly an hour of working, the crew reconvened on the bridge. They had confirmed the loss of the science team. Their section of the ship, towards the rear, had been torn off along with the aft ring. Robinson hadn't been able to locate the debris on her initial survey, but she had discovered that the gas giant had several moons, two of which

were earth sized, and one of those seemed to have a stable, oxygenated atmosphere.

Carter had also brought back the news that the life rafts were not as operational as Garcia had initially reported. Only five of them were actually operational. On the bright side, she had been able to restore one CO₂ scrubber, which, combined with their O₂ reserves, would stretch their usable air time at least a little.

Sorenson was still at the helm, doing his best to keep them in a stable orbit. The gravitational effects of the gas giant and its moons constantly fought against the crippled ship, and now they were limping their way towards the moon with an atmosphere.

Martin wrapped up their report with the news that they had indeed flung themselves into some distant solar system. He didn't know which. They didn't even know how far from Earth they might be. He had deployed a small buoy that was repeating their transponder signal, as well as broadcasting a general distress call, but he had pointed out that in the best possible case, they had somehow wound up in the Proxima Centauri system, and that it would be over eight years before they could even hope for a reply.

If that were the case, they would need to quickly make very serious repairs to the ship, and then somehow last eight years on whatever food they could scrounge up around the ship. But they had almost none. Their trip had been meant to be a two-day long science mission, an out and back to test the warp drive, as well as perform a handful of experiments farther from Earth.

Instead, they'd likely have to abandon ship altogether. But that raised another concern. Their escape pods—"life rafts," as the scientists had called them—had been damaged. Only five were operational, and there was six of them remaining. Johnson, Sorenson, Martin, Garcia, Robinson, and Carter.

As Johnson laid out the situation, the bridge was quiet. Nobody made eye contact. After a long pause, Johnson started, "As Captain, I think it's only appropriate that—"

"I'll stay," Garcia cut her off. Everyone else was silent, but pleading

with their eyes. "I'll stay," she repeated. "It makes sense. I know enough about the different systems of the ship to try to make repairs. With just me here, I'll be able to make the meals last for weeks instead of days. If you take Martin down to the surface of the moon, he can design a way for you to get back."

"Martina, you can't," Johnson pleaded.

Garcia shook her head and continued. "I have no family at home, no attachments. You have a husband. Sorenson's got a big family to get back to. Martin and Carter, you're both married as well." She paused for a moment, making eye contact with Robinson. "And that leaves me and Robinson. And I'm sorry Robinson, but I have the technical know-how to do this."

Robinson looked at the floor, tears welling from her eyes. "You're assuming any of us are getting home."

Garcia smiled sadly, "There's always a chance."

Martin shook his head solemnly. "Martina, I don't think there is. We're light years from home, best case. For all we know, we're in a different galaxy. Maybe even a different universe."

Garcia forced another smile. "So we just give up? No." She looked Johnson in the eyes and said, "I *will* stay."

With that it was settled. Garcia would stay with the ship in orbit, attempt to make repairs, and get a message home. The rest of the crew would escape to the surface of the Earth-like moon. They were mostly silent as they made preparations to leave. Carter did what she could with the life support systems, and assured Garcia that they would outlast the food. Robinson had tallied up the food, and said that if she rationed, she may be able to last as long as three months. Garcia said she planned on meeting them on the surface if she could repair another lifeboat, but it was obvious she had little hope of that.

An hour later, the crew reconvened in the life raft launch bay, their final preparations in place.

"I'll help however I can via radio," Martin said to Garcia.

"Of course," she replied.

Johnson took a deep breath before addressing the crew. "I know

this seems a little hopeless." She trailed off for a moment, finding the right words to say. "But we do have a shot here. Martina is going to do everything she can, and I'm sure I don't have to explain to you all how capable she is. This world has an oxygenated atmosphere, and seems to have abundant plant life, as I'm sure you all have noticed." She gestured out a small porthole window towards the moon; from this close of an orbit the lush green continents and deep blue oceans filled the entire window.

"We don't know what kind of life may be down there, how hostile it may be, or how docile," Johnson continued, "but we are about to make amazing discoveries. Alien life, on another world outside our solar system, and you all are about to be the first to witness it. You are the most intelligent, hard-working, resourceful people I know, and there is no one else I'd rather be marooned with. I can't explain why, but I know we will make it."

As Johnson wrapped up her speech, the crew's spirits were noticeably lifted, their dismal expressions replaced by looks of calm determination.

"Alright, let's get going. We don't want to burn any more of Martina's air than we need to," Martin said as he stepped into the small cylinder. Garcia closed the door in front of him, sealing him into the life raft with a soft hiss. Martin buckled himself in, looked through the small window at the crew, and gave a hopeful nod followed by a thumbs up.

Garcia nodded back, and pressed a button on the command console in the launch bay, and there was a soft thump as the life raft was jettisoned towards the planet.

Sorenson was next, climbing into the small cylinder and strapping himself in. He smiled warmly at Garcia before saying, "You got this," and closing the door.

"Thanks, Ben," Garcia said, before pressing the launch button. A moment later his life raft was hurtling away from the *Perseverance*.

Robinson was third, and she hugged Garcia tightly for a moment. "Come down to us as soon as you are able."

Garcia smiled and nodded. "Don't worry, Julie. I won't abandon

you." Robinson nodded, sniffing a bit as she climbed into her raft. She strapped herself in, and a moment later was also launched towards the surface.

Carter stepped up, and shook Garcia's hand. "I had a moment while we finished packing and tried to scribble down some notes for you. Scrubbers 03 and 04 are not functional, but you just need to replace the sorbent canister on 03, the heating elements on both, and the compressor on 04. If you can get that done first, you should have air longer than you'll have power. Sorry I couldn't do more. Call me if you need any help."

Garcia nodded. "Of course. Thank you, Hayley. Stay safe."

"Always." Carter stepped into her pod, and a moment later Johnson and Garcia were standing alone on the bridge.

"Kate, you take care of them," Garcia said softly.

"I will. You take care of yourself. If there is any way we can help, let us know. And if it comes down to saving yourself, or the ship, save yourself. I think he's pretty far beyond repair," Johnson replied.

Garcia chuckled. "She."

Johnson smirked. "Agree to disagree."

Garcia laughed and rolled her eyes. "I will see you again, in this life or the next. Get going before you breathe all my air."

Johnson nodded, stepping into her life raft. "Take care of yourself," she repeated. "Check in regularly. If you have to, raft number seven is airtight, so you could use it as a last ditch effort. If we ask you to drop supplies, use any of the beyond-repair life rafts. Make sure to save seven for yourself, just in case."

Garcia nodded. "I will. Be safe." She pressed the launch button, and was alone.

Garcia hadn't been able to repair the antenna in time to talk to the crew on her last orbit of the gas giant, but this time around she was prepared. She just needed to ask if there was anything else she could bring down when she abandoned ship. She had run out of food two days ago, while the ship's condition had steadily deteriorated. The remains of

an ancient ring system around the gas giant had filled the space with micrometeorites that continuously bombarded the *Perseverance*, and she knew the ship's hull wouldn't last another trip around the Jovian world.

She was waiting now in the launch bay, with her small pack of personal items, a journal, and a few more assorted components she felt might come in handy. The last year had been rough, but she had managed to extend her food supplies enough to last, with the help of the potatoes in a few of the meals. Sorenson had talked her through a basic aeroponics system, and she had been able to grow them in the hall outside the midship bulkhead. It was the only part of the ship with big enough windows.

That said, there were only so many things she could use to supply nutrients to the plants on a ship, and she had run out months ago. The last of the potatoes had been eaten two days ago, and she was almost happy about not having had to eat anymore. Almost.

"*Perseverance* Ground, come in?" she said, releasing the radio's button. There was a long silent pause. "*Perseverance* Ground, come in, this is Garcia." Another stretch of silence, punctuated by the sound of a micrometeorite impacting the hull of the ship. She flinched.

"*Perseverance* Ground, do you copy?" she asked again. Nothing. "Alright, I'm not waiting around forever," she whispered to herself. She glanced around the ship once more, double-checking to see if there was anything else she could squeeze into her life raft. She wasn't certain that her repairs to its life support system would be effective, so she also had a small tank of O₂, only good for maybe ten minutes. Hopefully it wouldn't be necessary. She climbed into the life raft, strapped herself in, and clutched the tank tightly as she pressed the launch button.

Nothing happened.

She tentatively reached out and pressed it again, and it failed to respond again. She let out a long sigh, opening the hatch release and stepping back out into the launch bay.

After nearly an hour of examining the raft, she discovered the problem: the launch mechanism that held the pods in place was

damaged, likely from the micrometeorites. But that meant it was impossible to launch the life raft.

Garcia wandered back to her bunk in a daze. The thought of joining her crewmates on the surface, of sleeping away years at a time in one of Martin's cryopods had seemed foolish at first, but now it was all she wanted.

She sobbed for a moment, and then performed a Sign of the Cross, whispering a prayer. "God, please. Allow me to join my crew. Please, I will do anything. Abuela, I beg of you, please intercede on my behalf. Spare me this strife. Please." She paused for a long moment, and then took a deep breath, "But Your will be done before mine, Father."

She let out a long breath, and then stood slowly. She knew it was hopeless to try to repair the mechanism. She'd have to do so from outside the ship. She didn't have enough supplemental O2 for another extravehicular mission. She also lacked the parts, or the means to fabricate them.

She quietly resigned herself to her fate as she laid back in her bunk. As she rested quietly, listening to the impacts of more micrometeorites impacting the hull of the derelict ship, she said another quiet prayer, and began to drift off to sleep, her mind unable to come up with another solution.

Just as she felt sleep's restful embrace, she was jolted awake by a deafening bang, followed by a horrible metallic tearing sound. She jumped out of bed and raced for the bridge, but was stopped short by the bulkhead closing at the entrance to the bunks. "No!" She screamed, and pounded on the thick metal. The ship lurched under her feet, and she was thrown into the wall violently, her forehead split open by the impact.

She struggled to her feet as blood dripped into her eyes. She stumbled over to the window and gazed in awe as a swarm of rocks flew by, heading towards the gas giant. She didn't know if it was debris from the rock that had hit the ship, or simply a meteor shower, but she knew it had doomed her case.

Still, she could not help but stare in wonder at the show. The ship

followed the meteors towards the Jovian world, and it was only as she felt the glass in the window heating up that she realized her orbit had been destabilized enough to pull her into the moon's atmosphere.

Garcia didn't stop watching. After all, the ship was without power, without communications, without help. This would be over in minutes. She prayed that her crew would be safe, and that God would take her quickly.

A large chunk of rock crushed the bunk module at that moment, tearing it in half, and flinging its contents into the atmosphere. Every piece of debris and every little meteorite ignited as it sped through the upper atmosphere, burning away into nothing as they fell. A few of the larger chunks of the ship held together, and their scorched remains crashed into the side of a mountain, halfway across the planet from the rest of the crew.

Inside the bridge module, the ship's primary computer core, powered by a shielded fusion reactor, and with a small display found on its top, survived the crash. It contained all the data the team had collected, and all of the designs Martin had mocked up over the course of the year.

If someone were to find it, it would be a valuable guide to developing tools to leave the planet with.

Martin scratched another X onto the wall of the cave, representing the 400th day of their isolation on this planet. They had not yet had a winter, and Robinson had estimated that their planet rarely, if ever, saw freezing temperatures, so their humble camp in the shallow cave was rarely heated. Tonight though he had built a small fire, more for the light than the warmth, but he had to admit that he did enjoy the cozy feeling of a good campfire. Sorenson was onto something there.

He sat at a makeshift table, built out of off-white wood from the native trees, and wrote in a notebook he had made and bound himself:

Day 400. I'll be waking up Johnson in the morning.

The cryogenics I rigged up with the life rafts seem to

be functioning well enough, but they need constant maintenance. The 4th unit especially, I'll need to ask Garcia for more compression coils when she comes around again. My designs and notes are in my blueprint book on page 24.

Sorenson's garden has been relatively fruitful. We still have yet to explain the similarities between many of the plant and animal species here, and the ones home on Earth. Robinson's latest theory is that we didn't tear a hole in space, but in time, and have somehow traveled back to a prehistoric Earth. How we are orbiting a gas giant nearly the size of Jupiter doesn't seem to have factored into her theory.

Our moon is very geologically active, and I'm nearly done designing the generator for the hydrothermal vents to the south. If we're able to build it, we may be able to produce enough energy to get a signal out of the system. See notes above about the radiation in the outer asteroid belt.

Martin paused for a moment and stared into the faint blue coming from the cryo-sleep caskets he had built out of their life rafts. He had been able to strip the fifth for parts to repurpose their life support systems into cryogenic systems. Garcia had sent down a few shipments of supplies from the ship, but had always remained tightlipped about how the situation was up there.

He knew that meant it wasn't good. Judging by the number of components and other items she'd sent down, he assumed she'd stripped most of the ship of its useful pieces, save for life support and communications. The radiation in the asteroid field at the outer limits of this star system made most of their attempts at communication futile.

Martin sighed softly and turned back to his journal, picking up the pen to write a little more:

I've recorded all I can about the flora and fauna around for Carter. She has taken a fascination with the large gecko-creatures. They seem to be forming a very rudimentary society, but neither her, nor Robinson has been able to make any real headway with communicating. I'm not sure why she bothers, considering—

The sound of metal crashing onto stones came echoing in from outside the cave. Martin paused a moment, and was about to ignore it when he heard another, larger crash. He stood up and scrambled outside to find their small wind turbine laying on the ground, smoldering. The blades were detached and looked like they'd come off before it hit the ground. But what disturbed him were the arrows sticking out of it.

He looked into the darkness of the night, but couldn't see anything beyond the fringes of their camp. He couldn't even really see to the end of Sorenson's garden. He stepped back into the cave for a moment and retrieved a torch from the fire. Back outside, he carefully traced the perimeter of their walled off courtyard. The sandstone their cave was dug into was soft and easily workable, and they had managed to build a two meter wall surrounding an area the size of a large back yard out front of their cave. Martin had just finished sealing up the mouth of the cave, save for a doorway, earlier that week.

An arrow flew past his face, barely missing him by an inch, and embedding in the wall. Martin's eyes grew wide, and he turned back for the cave, sprinting straight through the garden, unconcerned with the damage he may be doing to the plants. He had no idea who or what may be attacking them. Their time on the planet had so far been peaceful, almost pleasant.

Another two arrows whizzed past him, landing in the ground near his feet. As he reached the doorway in the mouth of the cave, a shooting pain erupted from his abdomen, and he looked down to see the tip of an arrow protruding from his stomach. He shouted in pain as

he stumbled through the door way, collapsing on his side next to the pile of bricks. Blood poured from the wound, and he could taste blood in his mouth as he coughed and sputtered. He knew this was bad. Perhaps fatal.

Martin looked over at the caskets holding his crewmates. His family. Blood dribbled from his mouth as he groaned, clutching at his stomach. He pulled himself to his feet, desperately looking around for something he could use to protect them. His eyes fell on the stack of bricks next to the door.

Shouting echoed into the chamber from the mouth of the cave, a shrill, but somehow guttural sound. Martin suspected it was the strange gecko-creatures, but he wasn't waiting around to find out. He hastily grabbed a brick off the top of the pile and slammed it down into the door way, scooping some mortar with his right hand and spreading it roughly. His left clutched his stomach, and more blood dribbled out of the wound as he wheezed in pain.

As fast as he could, Martin continued to place bricks, trying to avoid placing himself in the doorway when possible. More shouting and crashing sounds could be heard from outside. It sounded like a war was happening. His mind raced as he placed brick, then mortar, then brick, then mortar.

A few more arrows shot through the small gap in the wall, one striking Robinson's casket. Martin swore, shuffling towards it a few steps before retreating back to the wall. If he was going to protect his crew, he needed to seal up this wall. He took his left hand off his stomach and placed bricks two at a time, trying to ignore the searing pain, and the blood running down his legs. He knew better than to remove the arrow until someone could treat his injuries properly.

His vision started to become blurry as he neared the top of the doorway. He reached up to place another brick in the gap and was overcome by lightheadedness. His head swam. He was going to bleed out. He needed immediate medical attention. He placed another brick. He looked down. He was standing in a small pool of his own blood. He looked at his crewmates, asleep in their caskets. He had to protect them.

He placed another brick. Two more.

Martin's breathing was becoming ragged, and his shirt and pants were soaked in blood. His vision was fading. He knew he only had minutes left as he placed the last brick, pressing it neatly into the last hole in the wall. He coughed again, more blood spurting from his lips.

He shuffled towards the nearest casket, Robinson's, and swore. The arrow had gone right through the control panel. He looked at the remaining caskets holding Johnson, Sorenson, and Carter. He had a vague idea that Sorenson might know some first aid. He had grown up in the middle of nowhere, right? A boy scout or something? Martin dropped to his knees and crawled towards Sorenson's casket. It was on the far end.

He left a trail of blood behind him as he clutched at the ground, moaning softly in between his shallow, ragged breaths. Martin reached Sorenson's casket, and realized this was it. He couldn't reach the control panel from the ground, He couldn't even lift his head anymore. As his vision receded and darkened, his mind began to wander. He had often wondered about the possibility of an afterlife. He had always dismissed the idea to others, but now he was about to find out. He wondered if it would be like that place in Austria he'd been to as a kid. Something about salt. Beautiful flowers. Pain. Rolling hills. Blood. A fortress. A river. A field. The last thing Martin could remember before losing consciousness was the thought that he had done right by his team. They were safe, and the rescue team could find them with the beacon.

Outside the wall in the cave, the field burned, the turbine was ransacked, and the wall was knocked down. The fire burned out into the jungle, and when the extinguishing rains finally came, it washed freshly loosened soils into the cave. The soils piled up against the brick wall, filling in the cave. The jungle pushed back into the scarred pit, reclaiming and rejuvenating the land.

Among the local tribes, the invaders had been conquered. And over time invaders turned into spirits, and spirits into demons, and demons into myth. The cave that held the four remaining caskets was

untouched for generations, viewed as a place of evil. When the Great Flood swept away the nearby village, the only accounts of the demons from the sky was lost, and the four humans slept, frozen in stasis, while time marched steadily onward.

Jonathan Sladko is a commercial aviation major who dreams of flying spaceships someday. He is also studying aerospace safety and space related topics, and enjoys writing science fiction based loosely on the science he is learning. He started writing at a young age and wants to publish a novel before he graduates.