

Transmission

Nate Soares

6h41 before transmission

First officer Selena Howell fought her way through thick layers of mute confusion. She couldn't form coherent thoughts, but already something in her registered the pounding of the alarms. She struggled towards consciousness.

Her heart shuddered in her chest, twitching in wake of the shock that had spurred it back to life. Her heartbeat pounded in her ears, faster than the wailing of the sirens. Every limb spasmed, the deep chill receding as blood flowed through her veins for the first time in a hundred years.

Wake up.

The memory of her final briefing unspooled in her mind. *As soon as you awaken, begin your relaxation routine. The calmer you are, the easier it will be to reintegrate. Sympathetic nervous system arousal can interfere with the process and prolong the symptoms of waking sickness. Try not to panic; everything's going to be fine.* A few subjective minutes ago, she'd gone to sleep believing those platitudes. Now she awoke to a disaster.

Selena focused on her breathing and tried to slow her frantic pulse. It was no use. The sirens beat against the inside of her skull, filling her mind with nightmare scenarios. A hull breach, vital atmosphere hissing out into the soundless velvet night. A gravitational slingshot gone wrong, the *Front Line* tumbling into a blazing star. A power failure in the cargo hold and a thousand frozen people slowly thawing, dying. The alarms pulsed, promising catastrophe, revealing nothing. She needed more information.

She chewed on a tongue that felt like leather, letting the saliva gather in her mouth. She tried to spit and failed, uncooperative lips producing only a dribble of drool. It went right, drawn across her cheek by a soft but steady pull.

Deceleration. They must be close.

The wailing went on, and she strained against the bonds that held her wrists, her ankles, and her newly reconstructed head. At long last, her eyelids fluttered open, and the image of frosted glass registered in her sluggish brain. She forced herself to hold still as the cryotube plodded through its routine checks, unconcerned with the emergency unfolding beyond. No one had seen fit to program in a sense of urgency, and if the machine cared about the sirens, it was only through the increase in her blood pressure.

The minutes stretched out like decades until finally the pane cracked open with a hiss, the restraints pulling back into their compartments. She was out of the cryotube in seconds, ignoring the calm, recorded voice suggesting she relax and rise slowly.

Her feet slipped on the rungs of the ladder, and her knees buckled as she hit the ground with a thump, surprised by the strength of the gravity caused by the ship's deceleration. Pins and needles screamed across her whole body as she forced herself into a run, bare feet slapping against cold metal. At least the metal wasn't hot—they weren't tumbling into a star or burning through an atmosphere.

She stumbled and slammed into the bulkhead, a wave of nausea washing through her and culminating in an empty retch. Dizzy, she slid along the wall, using it to keep herself upright as she made her way to the nearest console.

...disequilibrium, loss of fine motor control, weakness or fever symptoms, reduced reaction time...

She mashed her uncooperative fingers against the keyboard a dozen times before the numbness began to recede, and even then it took her four tries to enter the correct password. One desperate minute later, she had the system fully online and was able to silence the alarms, filling the hallway with blessed silence.

Still shaky, but growing steadier with every step, Selena descended to the bridge and checked the ship's vitals.

No hull breach. No battery leak. All cryobanks stable.

She sagged with relief. The *Front Line* was still on course, if a few months behind schedule. The logs showed that the ship had been forced to avoid a stellar storm during the gravitational slingshot around Luyten 726-8. The diversion had left them on a slower approach.

After completing her overview, she opened the alert itself. There was nothing to see except a message, addressed to Captain Robins, sender unspecified. She didn't know whether to laugh or cry. They woke her up early from cyrosleep just to read an email.

Selena entered her password—first try, this time—and accessed the contents of the message. Whatever this was, it had been coded to set off the ship's alarms, wake her and the captain from cyrosleep, and demand priority attention. Protocol suggested that she wait for the captain, but didn't require it.

She began reading. Halfway through, her heart began to race again.

Captain Emily Robins drifted in and out of consciousness, dreams of klaxons brushing up against a warm voice that told her to relax and rise slowly. She felt a tingling in her arms and legs, and when her eyes opened, all was quiet.

After a few leisurely minutes she sat up, still in a daze as her thoughts picked up momentum. It took a while for her legs to feel they belonged to her again, and she waited another handful of heartbeats to be sure before she tried mounting the ladder.

The descent left Emily feeling slightly queasy, and she paused at the bottom, focusing on her breathing and soothing her ruffled nerves. Taking a step, she realized that she was standing on the ceiling. She shook her head, disoriented.

They must be decelerating, she realized, after a moment's thought. She looked up at her cryotube, mounted horizontally on the wall, a second ladder stretching away to what had been the floor when she'd gone to sleep what felt like ten minutes ago. Another blush of nausea bloomed in her midsection, and she sat down. Something wasn't right—she wasn't supposed to be woken up until after the landing.

Thoughts still fuzzy, she rose and pulled her uniform, upside down, from a sealed sliding chamber behind the ladder. She shook her head, as if to clear the lingering frost, and donned the ancient clothing. Catching a glimpse of herself in the polished steel of the bulkhead, she paused again, the reality of the situation finally sinking in.

It had worked. Her face broke into a broad grin, and she laughed, giddy. It had worked! The risks, the tests, the endless nights of studying, the competition, —it had all paid off, or would soon. One hundred years ago, they had suspended her. Now here she stood, alive again, in the depths of space, leading humanity into its next adventure.

The *Front Line* was humanity's first and only colony ship, but she held within her the capability to build a hundred more. Beneath the humming deck plates at Emily's feet, the cargo holds were stuffed to bursting with machinery—not just computers and scanned minds and cryobanks, but also ore extractors, refineries, and automated factories. They had everything necessary to begin humanity's journey across the galaxy.

She turned her eyes to her reanimated hands and flexed her fingers, tears of pride and wonder pooling in the corners of her eyes as she reveled in the potential of her species, who took their first steps towards the stars, and had no more need for disease and death.

We're almost there, Aiden, she thought. *Just a few more—*

She frowned, eyes on the chronometer mounted on the wall. Ten minutes ago, when she'd gone to sleep, the numbers had been steady and green, counting down from an impossibly high starting point of 35,192 days. Now they were red, flashing, and counting *up*. 51.2371 days, and then, after a few seconds, 51.2372, then 51.2373.

She hadn't been woken up early. She'd been woken up *late*.

A flutter ran through her stomach as she remembered the sirens in her dream. Her mind churned out a string of possible explanations, all terrible. Shaking her head, she straightened her shoulders, composing herself. She was the captain, after all.

First Officer Howell's cryotube was already vacant—Selena must be awake. It was just like Selena to charge straight ahead before

she finished fully waking. She was a fast thinker and a good first officer, but she was reckless. She made mistakes, and mistakes were not something they could afford this far from home.

Emily strode through the corridors and onto the cold metal bridge to find the other woman already at the controls. Selena had not even taken the time to don her uniform. The naked woman sat upright in the pilot's seat, tall and dark, hands flashing on the keyboard, her expression razor-sharp and laser focused. The commander had, no doubt, fired up the control system while still half asleep. Irresponsible, even in an emergency.

"Status?", Emily asked, her voice clear and commanding.

Selena gave no answer. Her eyes flickered over the screen. She flipped a switch and pushed the keyboard aside, grabbing the control column and easing it forward. The deck shuddered beneath Emily's feet and then lurched, throwing Emily to her knees as the direction of gravity shifted. She stood and frowned, suddenly lighter than she had been seconds ago. "Commander, I requested a status update and you will give one to me *right now*."

The other woman continued to stare down her instruments as she spoke. "Message for you," Selena said, her voice breaking as she pointed at the comm terminal.

"From Earth?" Emily asked, stepping over to the console, cautious. The break in Selena's voice had sent a shiver down her spine.

"No," Selena whispered.

FEDCOM COLONY T1 >>> FRONTLINE CPT ROBINS, EMILY
OVERRIDE FLP1 EXISTENTIAL

Solar system compromised. Earth destroyed, along with colonies L1, M1, and M2. Ark protocol autoengaged. 203,891,554,520 minds preserved via standard upload. Transmission scheduled pending compression, estimated +7h12 ($\sigma=16\text{min}$). Software patches for your receiver array already transmitting via EX override; install immediately or you will not have bandwidth to receive. If you have not yet alighted, or if you have not yet deployed your receiver arrays, do so now. We do not anticipate enough time to send this transmission twice.

6h16 before transmission

Emily looked up from the screen. Her mind refused to process the scale of the disaster, which was good—once it really sank in, there would be trouble. “What happened?” she asked.

Selena’s hands were on the keyboard again, blurring, making adjustments, crunching numbers. “No idea,” she answered. “No anomalous messages in the logs. We got a congratulatory message a few months ago, on the day we were supposed to land, then silence.” Selena shot Emily a quick glance, looking almost fearful. “Until this.”

Emily’s heart raced. A hundred years’ worth of messages from Earth—surely, medical science had advanced enough by now to restore even the least healthy of their passengers. *Almost there, Aiden*. But she couldn’t think about that right now. “No news since?”

“Just upgrades for our receiver, streaming in nonstop.”

“How far out are we?”

Selena paused, grimacing, squeezing her eyes shut as if to dispel a headache. “Nineteen hours by the original course.”

Emily blinked. “That’s too long,” she said reflexively, knowing it wouldn’t help.

“No *shit* it’s too long, *Captain*,” Selena snapped. “Now if you’ll shut up and let me focus, I might be able to *do* something about it.”

Emily bristled, but Selena was already continuing, the shudder in the deck plates shifting again as the apparent gravity suddenly died. Emily’s stomach lurched as she grabbed onto a handrail, to stop from flying towards the ceiling. The stars outside the viewport shifted as the cockpit swiveled. “The slingshot around L-seven-whatever went wrong,” Selena muttered. Her hands shook on the keyboard, and she took a moment to clench and unclench them. “We hit a stellar storm. The *Front Line* diverted, ended up on a safer but slower approach. We’re weeks behind schedule and low on fuel.”

“They think we’re already on the ground,” Emily whispered, her stomach sinking. “How much longer before the minds arrive?”

“Six hours. Seven at best.” Her thumb hovered over another button on the control column. “Get ready,” she said, pressing it. A dull roar shuddered through the ship, and apparent gravity was restored as the *Front Line* lurched under foot. Emily barely had time to get her feet under her.

“What are you doing?” she demanded, stepping back to the center of the bridge, where she could look over the first officer’s shoulder. Trajectory lines crisscrossed the pilot station’s main screen, with calculations and simulations running on all of the ancillary displays.

“I can get us down,” Selena said.

Emily's jaw dropped. "You're *accelerating* us?" she spluttered. "We should be three quarters of the way through *decel* by now."

"We just began a hard burn. If we sustain it for the next forty-eight minutes, we'll reach orbit in a little over four hours."

"At *interstellar speeds*, and with no fuel left for a decel. You'll turn us all into a smoking crater!"

"If I hit the planet's gravity well just right —"

"You're going to slam us directly into the planet, and if you don't, then you're going to slingshot us back into space without a drop of fuel left in the tank!"

"I'm telling you, I can do it," Selena snapped. "If we reverse thrust right at the perigee, we can cut our relative velocity enough to make a controlled descent."

Hope sparked in Emily's chest. *If there's anybody who can pull off a stunt like that...* "Show me," she said.

Selena nodded, directing Emily's attention to the monitors. They tabbed through hasty estimations and crude simulations, Emily struggling to keep up. Selena's notation was unorthodox, her assumptions difficult to pin down. It took nearly ten minutes before she understood what Selena meant to try.

"Selena..." she began, speaking the first officer's name like an apology.

"It's possible!"

"Commander," Emily said, this time with less warmth. She put her hand on the woman's shoulder. Selena brushed it off and turned in the pilot's seat.

"I can do this, Emily."

That's Captain Robins, Emily thought, but she didn't press the point. "Best case, you're looking at twenty gees of force at the perigee, followed by a minimum descent speed of seventy meters per second. Worst case, you're off by an order of magnitude. You will die."

"Thirteen gees for barely more than a second," Selena retorted. "I will pass out, briefly, and then I will wake up, and then I will land this ship."

"You will die," Emily repeated, "and the ship won't do much better. And that's if your calculations are perfect and your piloting is flawless."

Selena unclipped her pilot's straps and stood, turning, jaw set, eyes blazing. "I can do this."

Emily held her gaze for a long moment. "No, Selena, you can't."

"Two hundred billion lives. Run the numbers, captain. You can't possibly think my odds are that low."

"In order for this to work" Emily said gently, pointing at one of the screens, "your first pass around the planet would have to take us within five kilometers of the average estimated surface. If you *didn't*

slam us directly into the face of a mountain, you'd roast us both alive if the atmosphere is even slightly denser than anticipated."

"The aerobraking is part of the solution," Selena insisted. "There are two hundred billion human lives at stake, captain. *Two hundred billion!*"

"No, Selena," Emily said sadly. "We're twelve light years out. Those people died over a decade ago, when earth was destroyed." She closed her eyes and took a deep breath. "The three thousand people on this ship are still alive, and our duty lies with them."

"They're not any more dead than you were half an hour ago," Selena shot back, her voice escalating. "We have the receivers. We have the storage capacity. With the specs that Earth has been beaming us over the last century, we can build the bodies from *scratch* if we have to. But first we need to save them."

"We also have the only functioning starship," Emily said, keeping her voice as cool and calm as possible, "and the only machinery capable of restoring uploaded minds. We can't risk the final remnant of humanity on a foolish gamble."

In a flash, Selena was out from behind the chair, her hand around Emily's throat as she drove the captain against the bulkhead. "We are *not*," the first officer growled, "a remnant."

There were tears in Selena's eyes as she relaxed her grip fractionally, speaking through gritted teeth. "My mother is in that transmission. My father. My brother and his children. *Everyone we know* is in that message, Emily. They're *worth saving*."

Emily's eyes bored into Selena's as she struggled for air. Somehow, she managed to pour authority into her clipped, breathless words. "Put. Me. Down, commander."

Selena dropped her. Emily straightened, rubbing at her throat as the other woman backed away, naked chest heaving with emotion.

"My son is on this ship," she said, "along with three thousand other people who put their hopes and dreams into our hands. They gave up everything because we promised to bring them to a place of safety, to a fresh start, to a new beginning. We are not going to break that promise." She took a deep breath and straightened out her uniform. "And you, Commander," she said, her voice going cold. "You are not going to touch me again."

"Half of your colonists are sick or senile," Selena spat. She stalked from the captain to the center of the bridge and looked up through the viewport, where a pale red dot hung in the center, flanked by a thousand shining stars. "We were depending upon communication with earth to help us heal them. To upgrade our molecular synthesizers. To give us templates for generating vaccines and antibiotics and retroviral

cures. What good is our promise if we've lost the knowledge of humanity?"

"We'll have to hope that some of that knowledge was transmitted over the last century," Emily said. "As for the rest..." she shook her head. "What is lost is lost." She shrugged, voice suddenly weary. "We'll find a way. Many people on this ship will die, yes. But enough will live. Humanity will survive." Stepping up to the pilot's console, Emily keyed in the commands that would shut down the hard burn. Selena made no move to stop her. A few seconds later, the pressure beneath their feet halved, then halved again, until a gentle push from their toes was enough to send them floating a dozen centimeters into the air. "Where there's life, there's hope."

"You're dooming them all," Selena whispered, still staring up through the viewport, floating listlessly.

Emily steeled herself.

"Two hundred billion," Selena said sadly. "Ninety nine point nine nine nine nine nine percent mortality rate, when we've had the technology to cheat death for over a century."

Emily said nothing.

"No. My odds aren't *that* low, captain. One in a hundred. Maybe one in a thousand. But not one in a million." She took a deep breath, centering herself. "I have to take this shot."

The captain rubbed her temples, feeling the weight of impossible responsibility on her shoulders. "It's not about the odds of saving lives, officer. It's about the odds of saving our species."

Selena was shaking her head.

"It's about the odds of there being *anyone at all* left tomorrow. Right now, we can all but guarantee that three thousand human beings will wake up on Durre Menthor V in a bit over twenty hours."

"At the cost of every other human being born in the past one hundred and twenty years."

"It's my call, Commander. You are hereby ordered to return us to our original flight path, or plot a new one with a similar approach and landing solution."

Selena pushed herself back towards the pilot seat. "No. I'm sorry, Emily."

"I am the captain of this ship," Emily reminded her.

"Emily," Selena said, her voice the softest it had been since they woke. "You are my friend. You are my teacher. If we make it to the surface, there is no better person to make this colony work. But your captaincy is political. You were never meant to be awake during flight. You don't know how to fly the *Front Line*, and you have no one to enforce your orders." She strapped herself into the pilot's seat. "Even

if you did, there is no rank high enough to grant you the power of life or death over our entire species.”

She turned back to the control panel and reignited the burn. The deck plates began to shudder as gravity was restored. Emily collected herself and strode to the pilot’s seat, jaw set, eyes blazing. “Selena,” she demanded, with all the authority she could muster, “it is not worth the risk.”

Selena focused on the controls. Emily turned to one of the ancillary terminals and began keying in an override. Selena unclipped herself slowly and stood, drawing herself to her full height. She put one hand on the captain’s shoulder and spun the woman around.

Emily turned, staring up, and brushed the hand off her shoulder. “I outrank you, commander. I’ll shut this ship down if I have to. Return us to our original flight plan.”

Selena held the captain’s gaze for a long time, eyes cold and hard. “Get off the bridge, captain. I relieve you of command.”

Emily dove for the control column. Selena caught her by the upper arm and yanked, tossing the captain to the floor. Her eyes blazed. Emily tried to stand, but Selena put a bare foot on her chest, pinning her to the deck.

The larger woman bent down, locking gaze. When she spoke, her voice was frigid, but calm. “Your thinking is clouded, captain. Your son is on this ship, and it’s influencing your judgement. This colony was not intended to survive without assistance from Earth. And even if it could, would you have us face whatever it was that they faced alone? Have us walk blind into whatever it was that they couldn’t handle?”

She took her foot off the captain’s chest, letting her stand, and placed a finger on the center of her chest in warning, eyes still cold. “They need us, and we need them. I’m going to try to save them, captain. If you try to stop me by shutting this ship down, then I am going to break your wrists and land anyway, and the only thing you will achieve is lowering the odds.” With that she turned back to the pilot’s seat, uncompromising.

Emily shivered, feeling very small.

Clearly, there was no reasoning with her. “There’s got to be another way,” she muttered.

“There’s got to be another way,” she said louder, as Selena strapped herself in, barely listening. Emily’s mind whirled, searching for a path they hadn’t seen yet, as Selena added thrust to the burn. The apparent gravity increased, as the commander prepared to dash humanity’s final hope.

“Wait!” she cried, a half-formed idea surging to the front of her thoughts. Selena spared her a glance, and Emily scrambled to find the

right words. “We can set up the receiver arrays now. Catch the minds in-flight.”

“*Front Line’s* cargo doors don’t open in space.” Selena turned back to the controls.

“We’ll deploy them inside.”

“No room. We’re packed to the brim.”

“No we’re not,” Emily said, mind scrambling to find a way to make the words true, and finding one against all odds. “No, we aren’t. The fuel is mostly spent! The fuel tanks were *designed* to be repurposed as planetside shelter. We can deploy the receiver arrays there.”

Selena looked over her shoulder again, and paused. “Too small.”

“The fuel tanks are enormous. And if they can’t fit all the arrays, then, well, catching half the transmission is better than slamming ourselves into the side of a planet.”

A hint of doubt flashed across Selena’s face.

“We’ll make it work.” Emily pressed her advantage. “Look, I know it’s risky, but the odds are better than your suicide run. And if we fail, humanity survives. It will be hard without help from Earth, Selena, but it won’t be hopeless.”

Selena thought for a long moment. Finally, she canceled the burn. “All right,” she said, releasing the control column. “But you get one shot. And if this doesn’t work, we’re doing things my way.”

“It will work,” Emily declared as the acceleration died, pouring every scrap of faith and confidence she had into her voice. Everything depended on this working. “It will work.”

Selena pushed herself up from the chair and launched herself towards the hallway without a word, heading for the cargo hold. The moment she was out of sight, Emily collapsed in on herself, shivering violently.

We’ll make it through this, Aiden. I’ll wake you up, I promise. And humanity will go on.

A few moments later, she composed herself and followed, her hands trembling as she took a single, brief detour to pull a knife from the emergency kit and tuck it into the pocket of her uniform.

4h25 before transmission

Servos whirred as the receiver array began the deployment sequence in a dark and empty fuel tank. Selena watched in her pressure suit, standing at ease. They had passed the first three hurdles without trouble. Extracting the folded arrays from the cargo hold had been tedious but not strenuous in the microgravity. Emily had successfully overridden the safety mechanisms that prevented the arrays from deploying inside. Selena had disabled the massive pylons that would have shot their way through the ship's hull, thinking to anchor the array in extraterrestrial soil. Selena had even grudgingly agreed to use a deceleration instead of an acceleration in order to provide the artificial gravity necessary to simulate the conditions that the array was engineered to deploy under.

Now the only question was whether they had enough space.

The great central column of the receiver array telescoped upwards with a whine. At the top, the massive core began to open, the shell splitting to reveal the delicate, intricate petals within as they prepared to bloom. Selena glanced up at the hull towering above, held together by steel buttresses. The fuel tanks were larger than Selena remembered, and her optimism was growing.

This just might work.

But the main column just kept rising, too far. Then the petals unfurled with startling speed, larger than life, too close to the ceiling, and the only possible outcome from this folly became starkly clear.

"No no no no no!" Emily's cries of horror rang through the hollow tank in anticipation, as the edges of the unfolding dish shot straight towards the hull. Selena couldn't bring herself to tear her eyes away as the delicate petals slammed against the thick metal and began to crumple, still unfurling, crushing more and more of their fine structure into unrelenting walls, breaking like a wave upon the rocks.

Metal whined, and the array's main column buckled under the strain, listing sideways. Selena tore her eyes away from the screeching destruction and strode back towards the bridge, determination in her step.

Emily pursued. "Wait!" the diminutive woman cried, as the receiver array collapsed, drawing screaming gouges down the ship's hull. "We can partially deploy the next one, we can modify it to—"

Selena spun and found herself shouting. "You already wasted two hours and too much fuel destroying one of our receiver dishes. That's *twenty five billion minds* you just killed. We have seven receivers left, and less time than we need. So tell me, *captain*, why should I wait?"

Emily gawked. Selena turned back towards the bridge, increasing her pace, turning her mind to planning the descent, guessing how she'd

need to modify the trajectory, preparing herself for the flight of her life. There was no margin for error here.

It really *was* insane, and she knew it. Even in peak physical condition and a pressure suit, she'd have trouble handling thirteen gees, even for a few hundred milliseconds. And now she might need to handle even more, since they spent so much fuel on Emily's decel. Stupid, stupid, stupid.

But still, she had to try.

She entered the bridge, with Emily in hot pursuit.

"Selena," the captain reasoned, her voice strangely calm, her hand twitching at her side, "You're not gambling our thousands against their billions. Think! You're gambling with the entire future of humanity. If you destroy this ship, we go extinct."

"They have our history, our culture, the entire accumulated knowledge of our people," Selena retorted, voice calm, as if rehearsed. "Do we have any great thinkers, here? Any great philosophers? How far do you think we'll get, without their help?" Even as she spoke, she started clearing her mind. "If we don't die cold and alone under a foreign sun, we'll die the same way they did." She climbed into the pilot's seat, focusing. "If I fail here, there *is* no future for humanity."

"There can be, Selena." She paced back and forth behind the pilot's chair, practically prowling. The defeat and desperation were gone, but there remained a hint of pleading. "There can be us."

Selena fastened the straps.

"You don't have to do this. They're already dead, Selena."

"Not if I have anything to say about it," some part of Selena replied, while the rest of her concentrated. She reached for the control column.

"You don't have anything to say about it," Emily said, hand straying towards one of her pockets. "I am the captain, and you *will* obey my orders. And I order you to maintain this decel."

Selena cut the deceleration, not caring to check whether Emily had grabbed onto a handrail first. The stars in the viewport spun as the cockpit swiveled.

"Commander," the smaller woman demanded as she lurched, unphased by the loss of gravity, "I have given you an order."

Selena ignored the captain. The tiny woman's eyes grew sad.

"Selena, *please*. I won't ask you again."

"You had your chance. You failed. Now it's my turn." She had the ship's computer begin the recalculations. "Now get off the bridge and let me fly." Selena's focus was on the monitors as she fired up the engines. Emily's feet thumped as they hit the deck again. Selena didn't even spare her a glance.

"I have to try, Emily," she apologized.

"No, you don't."

Selena felt a cold sharp pain just below her neck. She was already whirling, before her mind fully processed the feeling, before the pain set in. Her hands clawed at the pilot's straps, releasing them. Her right shoulder screamed as Emily stumbled backwards, clutching a bloody knife, eyes wide.

Selena hardly felt herself move. She only felt the small, pale fingers snapping in her hand and heard the clatter of the knife, felt the wet crunch as she slammed Emily's head into the hard metal bulkhead again and again, until the screaming stopped.

Emily's body slid down the wall, leaving a streak of red, blood still pouring from her split scalp. Selena stumbled dazed back to the pilot's seat, hands still dripping, and increased the burn.

23 minutes into transmission

The *Front Line* fell, tearing itself apart in the heat of re-entry, shedding white-hot debris as it etched a trail of fire into a virgin sky.

Above, two hundred billion minds streamed forever into oblivion.