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"Before we begin our descent, Commander, I have a message to play for the crew."

Commander Kate Holman managed a near-perfect poker face despite the unwelcome voice in her helmet. Only her clenched jaw betrayed her anger. It wasn't just the outrageously poor timing of Julian's ask that drew her ire, moments before the seven most critical minutes of their journey. His pattern of almost daily callous acts and slights had numbed her to his antics. What really riled her was his use of the main comm line instead of a private channel. Julian's lack of discretion meant they would discuss the matter in front of the entire crew.

What could the message possibly be? Had Julian not irritated the shit out of her for the past five months, she might have asked. Regardless of its content, there was only one answer Kate could give him, but she'd take her time delivering it—she was the mission commander, not a lackey waiting on his every word. She dragged her gloved finger along her station's screen, swiping the next page of the pre-landing checklist into view, and set it scrolling with a casual flick. Guiding their craft from atmospheric insertion to touchdown was the real business of the moment. A Mars landing was a tricky affair where even the most minor misstep could mean skittering across the thin atmosphere to carom off into space, burning up in a meteoric streak of pyrotechnics, or forming the newest impact crater on the dusty red plains. They needed to devote all their attention to landfall.

The commander dispatched two checklist items with leisurely taps. Julian stared at her from four stations away, the shine of the overhead lights repeating along his helmet and the portion of

his smooth, shaved head that peeked from his communications skullcap. Surely, he understood now was not the time for distractions, that she'd have no choice but to deny his request. So why invite a public rebuff? He was up to something; she couldn't see what. "Julian," she said, hiding her annoyance behind her taut tone, "we're a few minutes from entering the atmosphere, the point where all the you-know-what really will hit the fan. We need to focus on one thing, which is getting to the ground safely. Let's hold off on your message until after we touch down."

Kate quickly dismissed three more items on the checklist. Commander Glenn Wiles, her second-in-command, would oversee their descent, though she'd closely monitor their progress. Women had made great strides during NASA's eighty-four-year history, but she still felt the weight of being judged as a *woman* commander. The mission needed to be perfect, every execution flawless.

"That will be too late, I'm afraid."

This time Commander Holman swiveled fully from her station and faced Julian, all remnants of her former poker face melted away. For any of the other astronauts under her command, her answer would have been the end of the discussion, eliciting silence, a sheepish nod, or at most a meek "yes, ma'am." Julian seemed to operate from a different mindset, one where her decisions were never the final word.

"I have orders to play a message for the crew before we enter the atmosphere," said Julian.

Orders that she didn't know about? Bullshit. "Orders from whom?"

"Assistant Director Pearson."

Kate's cheeks flushed, all eyes landing on her. As the number two person at NASA and the champion of their trip to Mars, Assistant Director Pearson was certainly within his rights to

communicate directly with any of her astronauts. But why would the AD, himself an Air Force veteran, disregard the chain of command? She fumed, in part at the delivery of secret instructions to a subordinate, but mostly at being forced to give Julian his way. "Well, let's have it," she grumbled.

The capsule's main viewscreen came alive with the black glow of an empty data feed, then snapped to the NASA logo suspended against a bright white background. The image switched to Assistant Director Pearson seated behind his desk, looking thin and squirrelly as ever. His dark, narrow-set eyes hovered under his bald crown, and when he smiled, the left side of his mouth rose higher than the right. "Crew of the Ares, I want to congratulate you on your impending achievement, the first humans to land on the surface of Mars. For the next year, you will perform research and explore the Martian surface, an amazing accomplishment we should all be proud of." The assistant director slid a cigar—a Macanudo by the band—from a desktop humidor as he spoke. He clipped the end and held his torch aloft, puffing the cigar to life. He seemed about to speak but paused, turning the cigar sideways and studying it, apparently impressed by its flavor. "Now the other day in the Capitol, a senator approached me, almost chased me down through the halls, in fact. I'd sparred with him many times in the Appropriations Committee. Never considered him particularly bright. In any case, he'd somehow gotten a look at the off-budget figures for your mission and asked me point blank how the hell in these fiscally challenged times I could justify spending over nine hundred billion dollars on ten roundtrip tickets to Mars."

The assistant director paused for another puff of his cigar, the end glowing red behind the nub of ash. "The good senator had a point. And the answer to his question begins with our first visit to Mars, the Viking landers in '75. Twenty years went by before we would return, with two

orbiters, a lander, and a rover in the '90s. We sent another orbiter in 2001, two more rovers in 2003, an orbiter in 2005, a lander in 2007, and twenty-one more missions in the thirty-five years after that. And those figures only cover American interest in the red planet. There were also the ESA and Chinese missions. And I won't even bother to mention the Russians—those poor devils couldn't touch a craft down on that planet to save their life." He puffed again. "My point is that an astute observer would guess there must have been some development on Mars to have triggered such intense interest. That brings us to your mission, ladies and gentlemen. There's only so much you can do with rovers and landers and satellite imagery. The next phase of our interest in Mars involves boots on the ground, your boots, in search of a payout for a wager that began five decades ago. And while I'm sure a year's worth of abrading rocks and drinking your own wastewater will prove scientifically enlightening, it's this other interest, this *classified* interest, that's the real reason for your trip to the red planet."

Stunned silence filled the cabin as the assistant director relit his cigar.

"Everything we've trained for, all our preparation, that was a front for some classified mission?" All attention shifted to Mission Specialist Casey Morgan, the expedition's astrobiologist. Several of the other astronauts nodded in agitated agreement.

"Some of you might find this news upsetting," continued the assistant director. "Let me assure you, as a practical matter, nothing has changed. You'll still carry out all the studies and experiments you've prepared for. They're all still very important, because they serve as a smokescreen for the true goal of the mission. Security Chief Julian Grimes and Mission Specialist Joseph Cheney have been briefed on those particulars. While the rest of you go about your assignments, Grimes and Cheney will handle all details and execution related to the

classified task. You are to give them your full cooperation."

Kate stole a glance at Julian. He watched the video message with a dispassionate expression, hands folded in his lap. How long had he and Cheney been preparing for this secret aspect of their mission? From the start, if the AD was serious about it being the true reason for their trip to the red planet.

"Commander Holman." Kate jumped at the unexpected mention of her name. "I apologize in advance for delivering this next part in a pre-recorded video stream rather than face-to-face. To drive home the importance of your mission's primary objective, I am placing Grimes in charge as the acting mission commander, effective upon your landing."

The news elicited a self-satisfied smirk from Julian. For Kate, the assistant director's declaration knocked the wind out of her, a sucker punch straight in the gut. The years of toil, the wrecked marriage, the sacrifices she'd endured to secure the command of a lifetime all whisked aside like so much rubbish. Her heart ached, the memories of her late mother beaming in awe of her daughter's achievement forever footnoted. The commander's shoulders slumped forward, and her chin quivered beneath her bowed head. A tear fell, then a second, splattering inside her helmet.

Someone was watching.

Kate discovered Glenn looking on from across the capsule. Flustered, she reached for her damp cheeks, but her hand smashed into her helmet. She buried herself in her station.

"Your mission is a momentous endeavor," said the assistant director, "one which will likely change the course of human history, and if we're lucky, the bottom line." Kate looked up at the video, catching Pearson's final puff and his crooked smile. "Best of luck, *Ares* crew." The screen

went dark. No one stirred, the flashing lights of their terminals the only movement within the capsule.

"Do the geniuses back home think we're all idiots? That is a crock of bull ... shit!"

The words came from Allison Voss, shocking even for the normally testy Mars station engineer. "Hold on, Allison," said Kate.

"The mission of the century turns out to be a front for a classified operation?" asked Mars station chief Miriam Sato.

"Wait, wait," said Kate. The rising emotions risked overshadowing the important job that still remained. She needed everyone to keep it together until their spacecraft reached the ground.

"While the rest of you go about your assignments," said Dr. Clayton Fisk in a mocking voice, his index finger in front of his mouth and curled around an imaginary cigar, "Grimes and Cheney will manage the classified task, which is the true reason for your mission. Please give my two toadies your full support as they search for the lost pleasure dome of Xanadu."

Julian's face reddened. "Disrespect towards a superior officer is a court-martial offense," he said.

Fisk laughed. "My official designation is 'Spaceflight Participant.' Are you saying you intend to make me an officer?"

A loud whistle squelched the commotion and gathered everyone's attention.

"Thank you, Glenn," said Kate. She reviewed the upset faces staring back at her around the cabin. "I'm as shocked as the rest of you about the message we just received. But right now, we're about a heartbeat away from a crash landing. We need to make sure this spacecraft touches down safely. So please, put everything you saw out of your minds and—"

"Commander Holman's right," said Julian. "There's no time for grumbling. We all have a job to do."

"I'll thank you not to talk over me." Kate had lost count of how many times Julian had interrupted her during their flight to Mars. An unconscious habit or deliberately malicious, either way, it was damn irritating. "And if you don't mind, Julian, *I'll* give the directives on this ship. Your reign begins the moment we touch down. Until then, *I'm* still the mission commander."

Julian threw Kate a spiteful glance but said nothing more. He turned back to his station.

Kate chided herself for her outburst. She'd normally never have hurled such sharp words, but they'd taken a lot from her that day. She wanted to scream at Julian, scream at the assistant director. And maybe she would, but not then. None of it would make one damn difference if they didn't reach the ground in one piece.

"All stations report with pre-landing status," said Glenn.

Kate dispatched the remaining items on her checklists and swiped back to the main screen. Her display filled with an image of Mars's western hemisphere, a mottled orange disc floating against a starry backdrop. A gray dot, the *Ares* capsule, slid along a dashed white arc that traced the spaceship's trajectory. A halo of annotations reported the craft's speed, altitude, and other vitals.

Sweat beaded on Commander Holman's palms, growing to a torrent that emerged faster than her gloves could wick away. Her pulse accelerated and she lapsed into a series of shallow, rapid breaths. Her suit peppered her with chimes, warning that she teetered on the edge of unconsciousness.

She was panicking. But why?

You know why.

It couldn't be that. She'd conquered the past. And in any case, an atmospheric landing was nothing like a touchdown on the airless Moon.

Then why'd you ask Glenn to handle the descent?

Glenn was her rock, her steadfast lieutenant. During the two years of training for the Mars mission, her reliance on him had steadily grown. In spite of several annoying habits, he had a good heart. She trusted him as much as she trusted herself, maybe more.

You didn't answer the question.

Ignoring the nagging voice in her head, Kate focused instead on her breath. She returned to the relaxation techniques from the long-ago therapy sessions. Her pulse and respiration dropped to more normal levels. She'd pulled herself back from the edge, but she wasn't out of jeopardy. If the mere thought of the touchdown had so easily chipped away at her hard-fought recovery, what would happen during the actual landing? Each descent stage carried its own unique perils. Each would become a dangerous stressor. If she didn't manage her mental state all the way to the ground, she risked a full relapse into debilitation.

"Ares at nominal orientation for atmospheric entry."

Kate girded herself for their hazardous entrance into Mars's exosphere. In less than two minutes, atmospheric friction would bleed off the bulk of the 12,500 miles per hour they'd marshaled to hurl their capsule between the planets. On visits to the *Ares* vehicle assembly building, she'd fixated on the craft's slim heat shield, their only protection against the 3,500 degrees Fahrenheit that easily surpassed the melting point of their stainless-steel hull.

"Speed decreasing ... 10,000 ... 8,000 ... 6,000. Exterior temperature readings nominal."

Kate licked her lips. Even catastrophic descents appeared normal at first. The flames that lapped the craft's underside probed the heat shield for weak spots in its bonded ceramic, the slightest imperfection in its metal alloy, hunting for any pathway to the delicate spacecraft. Kate's vital signs crept back up. She shook her head to rid herself of the morbid thoughts and focused again on her breath.

"Ten seconds to chute deployment."

Commander Holman breathed easier. They'd survived the brunt of atmospheric entry, though they still raced to the ground at 900 miles per hour. She gripped her restraints where they crossed in an "X" at her chest, the action ingrained from the simulator sessions on Earth.

"Three ... two ... one."

Multiple g-forces pinned Kate in her seat as the craft rocked and shimmied. She gritted her teeth through the violent movement. An exterior camera relayed video of the chute soaring above the capsule, a great white jellyfish scooping the rarefied Martian air beneath its bell, its tentacles tugging at their hull. They decelerated, but their speed bottomed out at 235 miles per hour. Mars had enough atmosphere to burn up a craft on entry but not enough to slow it for a landing.

"Preparing to jettison heat shield."

Kate fixated on her terminal screen, desperate for the landing target acquisition icon to appear. Once the ship discarded the heat shield and exposed the downward facing cameras, the computer would have milliseconds to locate landmarks and make course adjustments. Any hiccup could result in them touching down far from the HAAB. As it stood, even a perfect landing meant a two-kilometer hike to the Mars base.

Ten explosive bolts propelled the shield away from the capsule. Turbulence besieged the small craft with the exposure of its less aerodynamic underside. The commander squeezed her restraints tighter.

Seconds ticked away, but no target acquisition lock came. Had something damaged the cameras? Or worse? Kate extended a nervous hand to query the computer when green symbols cascaded across her terminal. The *Ares* had located its touchdown target and fired its thrusters in short bursts to position itself within the correct descent window. Another green icon emerged, signaling landing gear deployment. The system of struts, trusses, and shocks deployed from its stowed configuration was necessary but not sufficient for landfall—the *Ares* still fell far too fast to touch down.

A deafening whoosh flooded the cabin. Kate closed her eyes as the *Ares* entered the final and riskiest landing stage. Air rushed through exposed intakes to the atmospheric braking system, an experimental series of manifolds that compressed the meager Martian air prior to releasing it as a roiling pocket of high pressure above the capsule. The ram brake in essence thickened the air under the parachute enough to float the spacecraft to the ground. That was the theory at least. Even with all the simulations and prototype trials on Earth, Kate couldn't shake her concern that their landing would be the first test of the system on the red planet.

"Speed dropping. Ninety seconds to touchdown ... eighty ... seventy."

Kate followed their steady deceleration on her terminal. She forced herself to relax, her fears unfounded. The ram brake worked, and in less than a minute they would touch down, becoming the first humans to set foot on an alien planet. The culmination of two decades of planning. The dream of—

"We've got a problem," said Glenn. His deep, usually firm bassoon voice contained the slightest tremolo of fear.

"What is it?" asked Kate.

"We're coming in hot."

Indeed, Kate's terminal still showed a steady decrease in their downward velocity, but the computer projected they'd hit the ground at roughly four times the nominal landing speed. At that rate their craft, the *Ares* capsule and everything in it, would crumple on impact. "Can we get more deceleration out of the brake?"

"Negative," said Glenn. "We've got maximum airflow through the intakes. We're just not getting enough pressure out the topside."

Two stations away, spacecraft engineer Laura Engles, a red bandana wrapping her skullcap, unleashed flurries of taps on her terminal screen. "The air's quite cold ... much colder than it should be," she said with a hint of southern twang. Her accent, usually well hidden, always surfaced in agitated times.

"There's a storm front building," said Miriam. "NASA's been tracking it for the past few days."

Engles grunted. She was a caring, sensitive person except when she slipped into "engineer" mode, as she called it. At that point, she was all numbers and logic.

Schematics and reams of text scrolled on Engles's screen. Her finger settled on a graph and its accompanying table of numbers. "The designs assume a higher minimum atmospheric temperature. The lower temp throws off all those calculations. The system's scooping air, but with the cold, it can't produce high enough pressure beneath the chute."

Kate had pushed for sending a scaled down version of the *Ares* to Mars, outfitted with the experimental brake. She'd worried anything less than an actual atmospheric test on the red planet would leave their whole touchdown to chance. The mission planners cited budget constraints that made such a test impractical. They instead showcased all the data they collected from their slew of earthbound trials and simulations, insisting they'd accounted for every contingency.

Apparently, they'd missed one.

Klaxons blared and revolving emergency lights bathed the cabin in red chaos, the machinations of an AI co-pilot that had thrown up its hands. It could do little more than signal to its human wards their pending demise.

"Forty-five seconds to impact," said Glenn.

Kate scooted closer to her terminal and called up the main control screen. Her hand trembled as she swiped through the displays for each of the spacecraft's subsystems, desperate for any recourse that could help them survive the landing.

Shouts and turmoil erupted to her rear. Kate swiveled in her chair—she found Fisk, the mission's interplanetary geologist, standing free of his restraints. Terror gripped his face. "Are we there yet?" he roared, like a child on a road trip.

"Sit down and remain strapped in!" Kate yelled.

The professor landed back in his chair with wild eyes, the ferocity of her order driving him to near hysterics.

She shouldn't have snapped at Fisk—as a civilian, he lacked the extensive survival training that was a hallmark of the Astronaut Corps. She just needed them all in their seats. Whether she figured out a way to ease their impact or not, an unrestrained body would become a dangerous

projectile inside the cabin.

"Thirty seconds."

Returning her attention to her station, Kate's eyes landed on the photograph taped to the bottom edge of her terminal. Her children's faces stared back: Amelia, calm and collected; and Ben Jr., with his toothy grin

Kate resumed swiping. She stopped and backtracked to the thruster control screen. The attitude thrusters changed the spacecraft's orientation using bursts of compressed gas, but even if they all pointed to the ground, they wouldn't generate enough force to put a dent in their downward velocity. She scrolled instead to the controls for the third stage separation thrusters, powerful mini-rockets designed to push the capsule away from the booster during liftoff, at the end of the third stage burn. Ordinarily, those thrusters would have completely exhausted their fuel supply, but Kate had shut the system down early, holding some propellant back.

"Twenty seconds."

Kate checked the fuel levels. The tanks contained more than she hoped, but would it be enough? She'd also have to guess when to fire them. The thrusters burned at full force—there was no adjusting their output like a retro rocket. Starting them too soon would only delay the capsule's fatal impact, too late and the thrusters wouldn't have enough time to slow the craft. Either way, the *Ares* would slam into the ground.

"Ten seconds. Brace for impact. Seven ... six ..."

Mouthing a prayer, Kate tapped the ignition button. The third stage separation thrusters roared beneath the craft at full burn, slowing the capsule's descent enough to calm their computer co-pilot. In a blink, the AI cancelled the crash klaxon and secured them from red alert. Kate's

station showed the Ares hovering a meter above the ground.

The thrusters cut out.

The *Ares* lingered in the thin air for an instant until gravity restarted the capsule's downward fall.

Klaxons wailed for three quarters of a second, ceasing when the *Ares* slammed into the ground. The ship shuddered and the cabin filled with the sounds of wrenching metal. Shocks squealed beyond their tolerances as they strained to dissipate the spacecraft's momentum.

The impact mashed Kate into her seat. She waited for the capsule's underside to hit the ground and impart the full force of the crash to the fragile hull. The *Ares* would burst at its seams. When they'd first announced the Mars mission, Kate had imagined standing on the planet's surface and taking in the Martian sky. In her final moments, the ruptures would at least allow her a fleeting glimpse of the ruddy canopy.

The contact with the ground never came.

Kate's terminal, a patchwork of flashing red indicators, screamed about failures in multiple trusses and the complete collapse of a landing strut, but reported the capsule's velocity at zero. The landing gear held. She sat dazed for several seconds as reality sank in. They had survived the touchdown.

Screams of delight and relief echoed within the cabin.

"Ladies and gentlemen," said Glenn, beaming with sweat beaded on his brow, "welcome to Mars."

"Give me a live view outside," said Julian, still strapped in his seat. He wasted no time in asserting his authority as the acting mission commander.

"Yes, sir," said Engles. After a handful of taps on the spacecraft engineer's terminal, a thin strip of the *Ares*'s hull slid up and away, exposing sections of thick glass that ringed the capsule above their monitors. The *Ares* astronauts, still recovering from their brush with death, sat riveted by the panoramic view of the Martian landscape. Dunes of smooth, red dust continued for kilometers, peppered with black basalt rocks and outcroppings. Small hills rolled in the distance, and beyond them, a jagged mountain range unfolded beneath the red planet's butterscotch sky.

Commander Holman, rendered breathless by the sight, forced an inhale. In a few minutes, Mars would be crunching under their boots. Goosebumps stippled her skin.

"I don't know about the rest of you, but I'm ready to get out of this can," said Fisk. He released his restraints, rose from his chair, and stretched his arms. "While you're all collecting your things, I'm gonna use the litter box." He streaked toward the entrance to the lower crew compartment. "Don't leave without me."

"Negative," barked Julian. "You should have attended to that business before our descent.

For now, rely on the facilities in your suit."

"You mean my personal hotbox?" asked Fisk, holding fast a few steps from his station. He frowned. "How can they build a space suit for twenty-five million dollars but forget to include an air freshener?"

Kate undid her restraints and stood. She grabbed the top of her chair, steadying herself on unsure, wobbling legs.

"Easy does it, everyone. It'll take some getting used to being in gravity."

The gentle admonition came from Dr. Nathan Palmer, the mission's medical specialist. The planet's pull, a third of Earth's, was stronger than Kate expected. The conditioning to lessen the effects of their months in zero gravity hadn't prepared her as well as she'd expected.

The capsule teemed with the sounds of excited chatter and shuffling bodies. The *Ares* astronauts fell into a line that snaked from the hatch, circling around the cabin. They leaned into bulkheads and stations as they countered the deck's eight-degree tilt, the wounded spacecraft listing from the collapsed landing gear strut.

Kate scooted in front of Glenn, taking her place at the head of the line. Her heart raced, though not to the rate driven by her anxiety before their landing. She was about to make history as the first human to set foot on Mars.

"You're in my spot."

Engrossed in the moment, Kate hadn't noticed Julian sidle up to her. Dazed and not understanding his comment, she could only blink back at him.

"The mission commander is always the first to exit the spacecraft," said Julian.

Kate looked on, stunned, as Julian muscled his way between her and the hatch. The other astronauts tottered in their bulky suits, making room as best they could while fighting to avoid falling backwards. When the line again settled, all the bustle and excitement that previously filled the cabin had dissipated, leaving a leaden silence.

Julian's white, boxy breather pack blocked Kate's entire field of view and knocked against

the outward bulge of her helmet when he moved. From the days of the Apollo Eleven Moon landing, the mission commander always exited the vehicle first, but how could Julian's last-minute elevation upend an event NASA spent a year preparing just for her? "Julian, the mission planners choreographed my descent down the ladder," she croaked, "wrote a speech for me to give ... for the cameras, I mean ... they're filming right this minute, outside the capsule."

Julian tapped a code into the keypad embedded in the bulkhead, then turned to Commander Holman. "They instructed you on how to climb down a goddamn ladder?" He smirked and turned back to the hatch. Kate wobbled in her place in line, gobsmacked.

A thin stripe of red light pulsed around the hatch, and a klaxon sounded. The wail waned with the cabin's evacuating atmosphere. Silence returned, and with it, the bleating stripe encircling the exit calmed to a steady red. Julian yanked the handle, freeing the latches that secured the door in place. He pushed the hatch out and open to a flood of bright Martian daylight. Standing in the doorsill, he beheld Mars. Kate shifted left and right, angling without success for a view beyond his bulk.

Julian thrust his arm to the right, outside the spacecraft. A leg followed. In a blink, he'd disappeared.

Kate stepped up to the hatch. Poking her head through the opening, she spotted Julian clinging to the capsule's exterior, gripping a ladder whose shallow rungs jutted from the fuselage. Julian scrambled six meters to the end where, balanced on the final rung, he wheeled about and faced the Martian surface. He remained there, unmoving for several seconds.

Apparently overcome, he was likely gathering his thoughts, struggling for the words to match a flood of emotions. "If you want—"

Kate had resolved to offer the short speech NASA penned for her, but the instant she spoke, the security chief simply hopped to the ground. He ambled a few paces from the capsule before rotating back to face the *Ares*. Peering at the hatch, he met Kate's gaze. "What the hell are you all waiting for?"

Springing into action, Kate swung out onto the ladder and descended, pausing on the last rung like Julian. No one had spoken to mark the occasion of humanity's arrival on Mars, the momentous achievement of setting foot on an alien planet. Should she still recite her prepared remarks? The sight of bootprints in the loose soil killed the thought. What was the point? He'd taken the first steps on Mars. Julian's grand indifference had defiled both the moment and the land.

"Say the words."

Commander Holman peered upward, squinting with the glare of the Martian sky. She found Glenn looking intently at her from the hatch. "It doesn't matter if his boots landed first," he continued, guessing her thoughts. He grinned, an annoying, unconscious reaction that struck whenever the weight of his sincerity overwhelmed him. "Say the words anyway. They're important."

Kate's eyes met Julian's. He scowled and violently thumbed at her to get down.

"Armstrong would've been a footnote if Aldrin had spoken in his stead."

Glenn was right. The history books would have forever quoted Buzz Aldrin, the second man on the Moon, if Neil Armstrong had skipped his historic remarks. Kate spotted an exterior camera filming the event, its red "recording" light active. The video, after a fifteen-minute delay, would be seen by billions.

Kate surveyed once more the Martian landscape, their home for the next year. She took a deep breath. "On Earth, Ares is the Greek god of war. Though we arrived in a craft called *Ares*, let the first steps we take on this alien world be ones of peace and goodwill, steps that forsake our ignoble spirits—violence, strife, greed, deceit. Let us walk upon this new land as Adam and Eve first walked in the Garden of Eden, absent the sins of man."

Hopping from the ladder, Kate floated to the ground in the slow-motion Martian gravity.

Cheers and claps rang out from the astronauts in the capsule. She stepped away, creating space for the others to descend.

Glenn landed next. He strode to Kate and patted her shoulder as he shook her hand. "Congratulations, Commander Holman," he said, smiling. Kate smiled back.

The rest of the *Ares* crew exited the ship, with Engles the last to step onto the ground. She joined the others where they had assembled in a broad circle a few meters from the spacecraft.

"Let's head out," said Julian.

"We have to perform the final suit checks first," said Kate.

"I already did that," said Julian.

Kate erupted. "You may have done it, but as mission commander, it's your job to make sure that everyone's checked their suits."

"Uh ... OK ...," said Julian, visibly flustered and irritated, "then let's do that."

Let's do that? The suit checks hadn't been a glimmer in his mind. If Julian received advance notice of his elevation to mission commander, he'd failed to review the duties that came with the position. The Manual dictated suit checks after every landing, better to discover a problem while still near the vehicle than halfway to their destination. The responsibility to ensure all such

checks had been performed fell to the mission commander. He was derelict in his duty, and that dereliction could endanger lives. Despite them wrenching her command from her, she wouldn't stand by and allow one of her astronauts to get hurt, or die, because of his negligence. She vowed to keep them all safe, even if he would not.

"Everyone please, thumbs up on green suit check," said Kate. Thumbs rose around the circle. Her own suit indicators—containment, pressure, oxygen reserves, temperature, navigation, reclamation—all rested safely in the green, per the soft, sheer graphics of her heads-up display.

Suit checks complete, Kate returned to the *Ares* and tapped a ground-level keypad. The capsule's door swung gently back into place, latching flush with the rest of the hull.

Julian scanned the Martian horizon. "Where's the HAAB?" he asked, a hint of concern in his voice. Was it really the first time he'd thought about where they were headed?

"It's that way," said Miriam, pointing to the west. "We're in a slight depression, which is why we can't see it from here."

Julian started forward, then froze. He turned to Kate. "If we're all done with the babysitting tasks?"

Kate chafed. Ensuring no one died on the way to the HAAB was hardly babysitting. "Then let's head out."

The astronauts followed Julian's lead across the virgin Martian terrain. They marched over friable dirt, stamping vibrant red bootprints where they crunched through the crusty, darker top layer. Their shuffling left a gentle cloud of red dust hovering at the ground in their wake.

The *Ares* crew spread into a line that spanned twenty-five meters, single file save for one pair of astronauts. From their suits, Engles and Casey: the former a beanpole, the latter all curves.

Everything she'd seen of Casey Morgan suggested a strict preference for men, but the chatty astrobiologist was never one to turn down attention. Kate brought up the rear, Julian's prescribed spot by custom. Not once did the security chief look back to check on the others. Most thrust into the role of mission commander would rise to the occasion. Only twenty minutes in, all signs suggested the opposite for Julian.

Kate trudged along, the expanse of Martian landscape interrupted mainly by Glenn, with his signature straight back, directly ahead. His perpetual perfect posture had clued her to the fact that most men walked with a slouch, especially those more than six feet tall like him.

Glenn cast a backward glance—had he sensed her thoughts about him? He stopped, allowing Kate to catch up, resuming his march once she reached his side.

"May I have the honor of walking in the presence of Commander Kate Holman, hero of the Ares mission?" asked Glenn.

What did he mean? She could ask him to elaborate, but sometimes with Glenn, moving on as if he hadn't said a word was the least irritating option.

"You know, at the time I didn't fully understand what happened with our landing. Only since we've been walking have I put it all together. *You* were the one who fired those thrusters, not the computer."

Kate said nothing.

"The thing is, those thrusters should've exhausted their fuel supply during our liftoff from Earth. They were set to burn to completion, to give us an extra boost."

A boost that would've gotten them to Mars all of three minutes sooner. "An inconsequential amount of extra thrust," said Kate.

Glenn thought for a second. "You shut down the thrusters, during liftoff, before they finished their burn," he said. "Did the computer flag a problem?"

Kate hesitated. "No." And could they please leave it at that? "Can we maybe switch to a different—"

"No sign of a problem during what was, by all estimates, a perfect takeoff, but you altered the pre-programmed launch sequence anyway?" Glenn's voice, full of dismay, shrank to a whisper, though they spoke on a private comm line. "That's a big deal, Kate. They've tossed people right out of the Corps for less. If something had gone wrong, that would've been the first thing they checked. Whatever possessed you to end the burn early?"

The answer seemed plain, but Glenn's expression suggested he was genuinely baffled. Kate struggled to maintain her composure.

"Oh," he said, mortified. "I ... never mind ... I see." If Glenn could have avoided dredging up the incident on the Moon, he would have—of that, she was certain. His penchant for sometimes saying the wrong thing had reared its head. "Well, your instincts five months ago saved the mission. Saved us all in fact. They should give you a medal."

"I don't want a medal," spat Kate. "I want my command back."

Glenn went quiet—a relief. Maybe they could walk in peace, not talking about the mission but taking in the first few pristine moments on Mars.

"How much do you know about this new objective?" Glenn asked.

"Nada," said Kate, irritated with the continued conversation and the topic. "That video was the first I heard of it. I learned about it at the same time as everyone else."

"So, with Grimes as mission commander—"

"Acting mission commander," corrected Kate.

"OK," said Glenn. "But my question is, does this mean you'll be taking over my duties?"

"I'm not assuming this is permanent," said Kate. "Or will even last very long. So no, proceed as if nothing's changed. I'm counting on you to keep tabs on the crew's well-being. With this disruption, it's more important than ever that you help with morale."

They managed several paces before Glenn's thoughts spilled out again: "It doesn't set a good precedent, whisking your command away from you like that."

"Evidently, there's some shift in priorities from up high," she grumbled.

"Yeah, but why the secrecy, and the awkward transfer of command? The only thing I could think was it had to be straight from the OPP."

The Office of Planetary Protection. "You think they found something?" asked Kate. "A sign of alien life?"

"They'd want to move quickly to contain it," said Glenn.

Kate kept quiet, her reserve that time inviting him to keep talking. With the AD shutting her out, any short-term explanation would have to come from piecing together whatever tidbits of information she could gather.

"Don't get me wrong, I don't know anything more than you," added Glenn. "What I said is pure speculation. It's all I could think for such a drastic action." He stopped and navigated an exposed basalt ledge that protruded from the soft earth. After a high step, he offered his hand to the commander and whisked her up to join him. "Whatever it is, I can't believe no one briefed you on it. It's not like you're a security risk. You have the highest clearance within NASA." His head tilted as his attention drifted to a wispy white cloud far above. "Maybe they deemed it need-

to-know."

"This is my mission, Glenn." Kate's chin quivered and her eyes brimmed with tears. "My mission. There's no one who has a greater need to know than me."

They walked the following minutes in a hush. The *Ares* had landed in a wide, shallow basin, the remnants of an ancient impact crater. The terrain climbed gradually towards the basin's edge, rising steeper in the final hundred meters before the rim. After a spate of focused and determined paces through powdery, ankle-deep silt, they arrived at the lip and paused, surveying the land to the west. In the distance, a white-skinned structure gleamed among its dull red surroundings.

"HAAB sweet HAAB," said Glenn, lifting his sun visor for an unfiltered look. "If there *are* aliens here, they're gonna think we're giant hamsters."

HAAB stood for "Habitat At Ares Base," but with its maze of tube corridors and off-shooting cell compartments for living and storage, the astronauts declared it short for "habitrail." The structure's windows and solar arrays winked weak sunlight back at them.

"And there's the *Gaia*," said Glenn.

Kate studied the spaceship that stood a kilometer from the HAAB, the silvery rocket that would ferry them home. "We'll need to check the propellant levels, first thing," she said. The *Gaia's* fueling station, a thin nuclear reactor that silently split subsurface ice into the hydrogen and oxygen that would power their return trip, sat a few hundred meters from the rocket. "I expect its tanks are topped off after a year."

"We haven't even made it to the HAAB, and you're already thinking about heading home?" asked Glenn.

"The Gaia is our fallback if there's an emergency," said Kate. "It needs to be ready to go at a

moment's notice."

"Commander Holman."

The voice was Miriam's. "This is Holman."

"Do you think we could take a break?"

Probably more than prudent. They'd been hiking for thirty minutes through unfamiliar terrain in bulky suits designed for outer space after a half year of limited movement. Kate had become a bit winded herself but had chalked it up to walking and talking.

"I asked Commander Grimes, but he told me we need to keep moving. The thing is, I'm out of breath."

Kate's blood boiled. Julian's apparent desire for a fast start didn't justify a death march. She cut to the broadcast channel. "Hey, everyone, this is Commander Holman. Let's take a tenminute break." The jagged line of astronauts that extended thirty-five meters immediately halted, except for the figure at the front.

"Belay that order," said Julian. "We're gonna keep going until we reach the HAAB." No one responded to his decree. Several astronauts hunched over, placing their hands on their knees.

"I'm beat," said Fisk. "I could use a rest."

"Me too," chimed in Casey.

"We're not that far. Only another klick or so. Anyone who's tired can rest when we reach the HAAB."

"I agree with Commander Holman," said Dr. Palmer. "We should stop for a ten-minute break.

This is the most exertion any of us have had in the past five months."

A tense stillness filled the comm. Julian faced the rest of the Ares astronauts from the front of

the line. Sunlight glinted off his helmet, its white surface aflame under the red sky. Hands on hips, disgust oozed through his pose. "Ten minutes, starting thirty seconds ago," he said. "Not a moment more."

Three astronauts ahead, a helmet swiveled back towards Kate. The reflective, golden visor hid the face, but the suit's short stature revealed its occupant's identity without a doubt. Miriam's sheepish hand rose, and a whispered, "Thank you," filled their private channel.

"No problem."

Glenn lowered onto a rock, barely high enough to keep him off the dirt. His long legs splayed like a grasshopper's—he could almost kiss his knees. He lifted his visor, the hue from the reddish soil setting his brown skin aglow. "Tell me again why we're lugging these space suits across the Martian countryside and not our Mars suits designed for the job."

"It's no mystery," said Kate. The Manual dictated that astronauts wear EVA suits on all vehicle excursions.

"A holdover from the sixties, when all they did was spacewalk. Or land on the Moon, which is like a spacewalk, 'cept you kick up a bunch of dust. But here on Mars? It's not like we need all this internal cooling to keep from overheating in the sun."

Yes, a dumb rule, but like all dumb rules, it had the same justification. "It's policy, Glenn." The Apollo-era mission planners left no notes about why they felt the need to codify the plainly obvious requirement of exiting a vehicle in a spacesuit. The Ares mission planners considered Mars suits for their landing but worried there might be some issue they'd miss if they did anything other than follow the directive to the letter.

"You're right, standard protocol: CYA," said Glenn. "Meanwhile, we're the ones left

managing all this bulk. With our Mars suits, we'd probably be there already."

Of course they would. Kate had flagged the problems with using EVA suits on Mars. Glenn's complaining was a pointless return to old battles lost. "Not much to be done about it now," she said.

Glenn squirmed on his rock, working to get comfortable. He steadied for an instant before shifting again. "I don't think Julian's going to like you ordering a break like that."

"Let him not like it," said Kate, fishing with her lips for the tube from her suit's water reclamation system. She sipped. "Why the hell are we driving so hard when we've got folks about to expire?" She took another sip. "We astronauts take care of our own."

"We take care of our own'—that was the number one thing they drilled into us in astronaut school," said Glenn. "Why do I get the feeling Julian skipped those first two weeks?"

"Commander Holman." Julian's voice in her ear gave her a chill. "Can I have a word with you?"

"Go ahead," said Kate. She made a face at Glenn that mirrored her dread, though he couldn't see it through her sun visor.

"Come to my forward position."

Forward position? Sometimes Julian talked more like a military man than a member of the Astronaut Corps. "On my way." She flipped back to her private channel with Glenn. "Julian wants me to come see him." Scanning ahead, she spotted the security chief pacing, a ball of anger and frustration waiting to loose itself on her. "If I'm not back before we start moving out, can I task you with bringing up the rear?"

"Sure thing, Commander." He saluted from his tenuous roost, gangly legs still splayed near

his cheeks.

Kate plodded to the front of the line, weary like the others and in no hurry for her audience with Julian. She offered a limp wave, a quick raise of her hand at the wrist, to each *Ares* astronaut as she strolled past. They all sat on rocks or the ground, but not Julian. No longer pacing, he stood facing her as she approached. Sun visor lifted, his dark eyes glared from their deep sockets beneath his tall forehead.

"This is how things are going to work here on Mars," said Julian, Commander Holman still four meters away as he spoke. "I give the orders, and the rest of you follow them. Is that clear?" "They needed a rest, Julian," she said, her hands pleading. "Five months in a capsule—" "I will decide if we do or don't need a break."

Kate perched herself on a knee-high boulder a meter from Julian, black basalt like the others and with a rounded top. Her legs and feet roared in relief—she'd apparently needed a break too. "Except Doctor Palmer's medical authority supersedes yours," she said.

"Palmer didn't have the idea of stopping until you placed it in his head."

"As mission commander, you're responsible for the well-being of your crew," said Kate. "It's your job to find out if anyone needs a break, to make sure we don't have astronauts passing out before we reach our destination."

"Miriam asked for one," said Julian. "So did Engles. I decided to push them rather than waste time sitting. They can sit all they want in the HAAB. The most important thing is getting there."

"But what's the big rush?" asked Kate. "It's not like the HAAB's going anywhere. And neither are we. We're here for an entire year."

"I want us to get settled ASAP," said Julian. "Or have you forgotten about our primary

objective."

Visions of the AD's video came flooding back, as did her emotions. "What's all this B.S. about a classified op?"

"It's not B.S.," said Julian.

"Oh no?" Kate's hands balled to fists. "What about leaving me in the dark about the whole thing ... taking my command at the last minute?" She hadn't intended to get into it with Julian out in the Martian wilderness. She'd planned to confront him once they'd acclimated to their new home. His comment set her off.

"All of that came from the AD," said Julian. "If you want an official explanation, you'll need to take it up with him." He placed his hands on his hips and struck a condescending pose. "If you're wanting my personal opinion on why you were kept in the dark, why you lost your command, I would think it has to do with your past. To be honest, I'm not sure how you remained in the running to lead this mission." His tone dripped venom, a black mamba striking with poisonous words. "When they gave you the *Ares*, I guessed it was all for show, a nice PR opportunity for NASA. I don't know that they ever intended for you to actually lead. Sometimes events seem mysterious, like they're the product of complicated machinations. Generally, the answer is much simpler. It's usually just what you think it is."

Julian eyeballed the line of seated astronauts. "Break time's over," he announced. "I promised ten minutes, but you'll have to live with six. The HAAB's not that far. If you're exhausted, you can rest when we get there. Gather yourselves and move out." Without waiting for anyone to follow, he marched off in the direction of the gleaming station.

The *Ares* astronauts, Cheney, Voss, Engles, and the rest, slogged past Commander Holman.

Still perched on her rock, she stared off at the angry red hills that rippled along the morose, ruddy horizon.

An open hand appeared before her. Kate ignored it at first but eventually looked up. Glenn towered above her, his white helmet and its golden visor framed by pink sky. He offered his hand again.

Commander Holman reached up and locked her glove in his. Glenn helped her to her feet.

The two set off after the others, trekking across the Martian plains.

"Love you, Mom!"

Kate reached for her daughter's cheek. She had to settle for a caress of her cold computer screen.

"Oh, and don't forget the warmer packs I gave you so your feet don't get cold in your boots.

You don't want to get frostbite on Mars."

Kate smiled. Amelia was an old soul: wise and practical, strong and inquisitive. So much like herself at nine years old.

"I'll get Ben. BEN!" Amelia disappeared, replaced by several fading shouts. Kate cherished the daily messages from her two children, even if the extreme distance made real-time communication impossible. She'd never finished one without tearing up, at least until then, the first message she'd received on Mars.

A small, round face with large brown eyes appeared on the screen. "Hi, Mommy."

Ben looked upset, on the verge of crying. Maybe Amelia had been rough in collecting him.

"When are you coming home?"

Kate fought back tears. Her four-year-old went in and out of grasping the concept of her protracted journey.

Amelia reappeared in the frame. "Not for a long time," she said.

Tears trickled down pudgy cheeks. "I want Mommy," wailed Ben.

Amelia grabbed her brother and caressed his head. "Don't worry, Ben, I'll take good care of

you until Mom comes home. I promised her I would."

The floodgates opened, sending rivers down Kate's cheeks.

"We've gotta go—Dad's calling us for dinner," said Amelia. "We love you. Byeeeeee." The two children spoke the final words in unison, the trademark ending to their check-ins.

The video message lingered on the last frame. Kate wiped her face. She'd been away from her children for five months and wouldn't touch or hold them for another year and a half. The thought was unbearable. As excited as she was about the Mars mission, her children's absence tinged every day with sadness.

Commander Holman closed the playback window and stood from her desk. She'd record a message to Ben Jr. and Amelia later. Time to start their first full day on Mars. Already showered and dressed in a blue station jumpsuit, she scooped up a light jacket and exited her cell. Her reflection followed her down the tubeway, quavering within each pitch-black, oblong window. Rising before the sun meant a lead on the others. She'd grab breakfast, and with it, a few precious moments of quiet to herself.

Kate emerged from the tubeway into the Spine, the HAAB's wide, cylindrical central corridor. The gleaming white elasticine walls echoed her footsteps as she moved through the sleeping station. She passed three more tubeway entrances, their lights low from inactivity, and arrived at the DFAC. She stopped cold at the entrance.

"Good morning, Commander."

Kate could do little more than blink back in momentary shock at the sight of Fisk, the mission's interplanetary geologist, beaming at her as he chomped on a granola bar. He stood in the center of the HAAB's spacious dining facility, a meal preparation space that included a

twelve-burner stove, dual ovens, a restaurant fridge, dishwasher and compost station, and an island with a sink.

"How was your night?" asked Fisk.

Hopes of quiet alone time dashed, Kate plodded into the DFAC. "I've had better," she said, rubbing her neck. Her first night sleeping in gravity in half a year left her stiff and exhausted.

"Me too," said Fisk. "I couldn't get comfortable on that thing NASA calls a bed. Back home, I have a king size with a pillow-top mattress—like heaven. Some days, I almost don't want to get up."

Small talk in the morning: a fate worse than death. Her introvert brain needed time to ease into a new day of human interaction. Ignoring Fisk, Kate set about assembling her breakfast. She picked through the galley's cabinets, loaded by NASA with an assortment of dishes, cooking utensils, and prepackaged food. Kate found the bowls, cornflakes, and a spoon; boxed milk chilled in the fridge. Her favorite protein bars, however, weren't apparent anywhere. She quickened her search, beating back a mild panic.

"Usually, people ask why I have a king-sized bed," continued Fisk, taking the initiative to float the question himself. "It's because of all the 'traveling' I do when I'm asleep. I move around, flop around, all night. Sometimes, I'll wake up, and I'm lying straight sideways across the bed." He took another bite. "But all things considered," he said through a mouth of granola, "I was grateful not to have to listen to Julian's snoring."

Bundles of shrink-wrapped, dried pasta and coffee greeted Kate as she opened one of the last unexplored cabinets. On a hunch, she pushed the packages aside and peered to the far back of the space. Through the tunnel of foodstuffs, she spied a stack of purple wrappers with a red stripe.

Relieved, she withdrew a bar from the pile and clutched it to her chest.

"Saaaay... what's that?" asked Fisk, eyeing Kate's bar. He pinched off a piece of granola and extended it to the commander. "Trade you for a taste."

Kate studied Fisk's offering, the leading edge still moist from his last bite. "I'm not a big fan of granola," she said, marshaling a quick excuse.

"No problem," said Fisk. He popped the morsel into his mouth. "I was thinking it'd be better to try a piece of your bar instead of grabbing a fresh one for myself. I'd hate to waste the whole thing if I find out I don't like it after a bite."

"If you make the slightest move for one of my raspberry bars, your arm will come back without a hand," said Kate with no hint of humor. "These are my favorite protein bars from home, which I made sure the mission planners stocked for the trip. They're here because of me, so don't even think about taking one." She closed the cabinet door and positioned herself in front of it with folded arms.

"My apologies," said Fisk. "I like trying new things. But I get why you wouldn't want to share if all you've got is what's in that cabinet."

"NASA stocked bars here so I wouldn't have to dig through a year's worth of food on my first day. There's plenty more in the Pantry, but they're for me alone." Spending her early morning with Fisk was bad enough. Having to ward him off her special protein bars was an additional annoyance.

"Got it, Commander," said Fisk. He smiled and offered a sorry salute, his thumb outstretched and the bend in his wrist creating the image of a man shielding his eyes from the sun. Astronauts didn't even observe the military custom. As a civilian, he had doubly no business saluting her at

all.

Kate collected her bowl and headed to the long, communal table and its matching benches in the center of the DFAC. She sat in the middle, facing the room's large bay window. The remnants of night painted the panoramic view in dark, colorless tones, the nearby rolling hills barely visible. The glow above the distant skyline's modest peaks heralded the rising sun.

Fisk had trailed Kate to the table, but rather than grabbing a seat, he remained standing. An unexpected bit of good fortune—she'd take it. The commander hunched over her bowl and dug into her cornflakes. Hopefully he'd clue in that she cared more about her breakfast than conversation.

"Say, any more info on the secret op?"

Kate had almost forgotten the last day's events, which included Julian's ascension to mission commander. She shook her head, responding to his question as much as attempting to rid her mind of the unpleasant memory.

"You know what I think?" asked Fisk. "I think they've found some kind of alien technology."
"Seems like a leap," said Kate, speaking through a mouthful of cereal without looking up.

His claim sounded nuts, in fact, but she didn't want to engage.

"That's what it's always been about," said Fisk. "Starting at Roswell, which was a genuine close encounter, by the way, the government's always been trying to learn as much as it can about the aliens' advanced technology. It means building more lethal weapons, designing faster planes and rockets to deliver those weapons, flattening enemy cities, turning tanks and ships to slag, teleporting behind enemy lines, hitting the enemy with overwhelming lethal force."

Kate stifled a groan as Fisk lowered himself onto the bench across from her.

"It's all about gaining a military advantage over the enemy."

She studied Fisk from a meter away. How had she never noticed the smattering of hairs sprouting from his nostrils? He was generally unkempt, a university professor too wrapped up in his work to care about personal hygiene. His dark hair curled in wisps where it grew on the sides of his head, hinting gray at the temples. His eyes sparkled with an excitement fueled by rocks and conspiracy theories. Neither topic appealed to Kate.

"All the various governments know aliens are real," said Fisk. "People think the United States doesn't want to confirm it because they're worried Americans will lose their minds. That's not it at all. The issue is none of these governments knows what the others know. If we confirm an alien sighting, if we say, 'yes, aliens can turn on a dime and accelerate at Mach twenty,' that draws the attention of the other governments. They'd all be interested in having that kind of technology for themselves. If we say it's real, they set their scientists on figuring out how it's done."

"What about the UFO encounters the United States military *did* confirm in the early twenties?" asked Kate. "All the film they released of unexplained aerial phenomena. And what about all the classified UFO files made public soon after by the Canadians and the French?"

"Subterfuge," said Fisk. "Diversions to get other governments to waste their time and resources on a wild goose chase."

"Uh-huh," said Kate, her mind struggling with the contradictions. She wracked her brain for an alternate topic. Fisk wore sweats and a headband. "What's up with the exercise gear?"

Fisk munched his granola bar. "I wanna hit the gym before everyone gets up," he said. "A little stationary biking will get the blood pumping."

Kate amended her previous observation: his excitement stemmed from rocks, conspiracy theories, and mountain biking. He professed on Earth and during the trip to Mars that he'd be the first man to mountain bike on the red planet. She'd repeatedly insisted it would be too dangerous. "You still think you're going out there?" she asked, nodding at the bay window.

"Absolutely," said Fisk, grinning. "My bike was waiting for me in my cell, just like I packed it. I've already oiled the chain and inflated the tires." His eyes became dreamy, the geologist losing himself in his imaginings. "I can see the headlines now: 'First MAMIL sighting proves there's life on Mars.' I can't go out riding in my biking shorts ... but maybe I can stretch them *over* my suit."

Kate asked NASA to disallow Fisk's bike on their expedition, hoping they'd agree with her on the foolishness of riding. They'd declined to nix it outright, but she still had the final say. "We've been over this—"

"I know, I know, you're not keen on the idea," said Fisk. "I'm gonna convince you it's safe. But first, I need to regain the strength in my arms and legs."

"Be careful not to overdo it," said Kate. The weightless five-month flight to Mars had weakened their bones and muscles, even with their prescribed exercise regimen. "We're all adjusting to the tug of gravity."

"Don't worry, it'll be a short workout." Fisk pushed himself up from the table. "Gotta save some energy for the sauna." With a wink, he turned and left the DFAC.

Kate ate another scoop of cornflakes, savoring the cold milk flowing over the rough texture.

Each bite unleashed a sensory explosion after months of sucking meals out of pouches. On ski

trips with her children and now-ex-husband, they'd spend the first mornings in their rented cabin

reaching for any familiar comfort—a bowl of cornflakes, a cup of coffee—in a completely foreign space. As the days progressed, that space would become a second home. Their arrival at the HAAB mirrored those first few days in a new cabin. They'd all settle in before too long.

Kate hoisted her spoon again, but her arm stopped mid-travel with the sight of a new astronaut entering the DFAC. *Miriam?* The waifish station chief marched to the galley. *Why's she up so early?* A classic computer nerd, Miriam gravitated to a later schedule. Whatever the reason, Kate's alone time would be short-lived: Miriam poured a cup of coffee, sauntered over to the communal table, and planted herself on the bench across from the commander.

"Good morning, Miriam." Though nearly Kate's age, Miriam seemed far too young for her position. Her delicate features, a product of the Asian side of her Japanese-Jewish heritage, heightened her youthful appearance.

"Morning, Commander." Unlike Fisk, Miriam said little, at least early on. Half asleep, she squinted through her glasses and took a tentative sip of her hot coffee.

"Surprised to see you awake this early," said Kate.

"Not my idea," said Miriam. She attempted a second sip. Her thin fingers cradled the mug, an oven-fired ceramic cup with thick walls and her name scratched on the side. The hand-crafted going away present came from her niece. The station chief had allocated part of her personal weight budget to bringing it along. "With the HAAB's exterior qualifications happening today, NASA woke me early to coordinate with them on the storm."

"The one we saw yesterday on the way down?" asked Kate.

"Yeah," said Miriam. "It's enormous. The latest satellite readout shows it's headed our way." "Is the HAAB in danger?" asked Kate. "They don't think so," said Miriam. "They just don't want any of us out in all the wind and dust."

The inspections wouldn't take them far from the HAAB, but standing even a meter apart, they'd risk becoming disoriented and lost if the storm brought whiteout conditions. "How long before it arrives?" asked Kate.

"Fourteen hours, give or take," said Miriam.

"More than enough time for what we need to get done outside."

Miriam nodded and said nothing more. She took a sip of her coffee, then brought her legs onto the bench, crossed them, and closed her eyes. The station chief often lapsed into moments of meditation no matter where she was.

Kate ate several more spoonfuls of her cereal. After emptying the bowl, she unwrapped one end of her protein bar and took a bite. Waves of ecstasy flowed from her tongue. She savored the tartness of the real raspberries, the sweetness of the shredded coconut, the subtle nuttiness of the almond milk, and the creaminess of the chocolate coating. The indulgence, vegan no less, contained the right balance of carbs and protein that would sustain her energy levels. She'd need it for the long day ahead. Kate delighted in a second bite of her bar. She took a third as a new figure entered the DFAC.

Julian?

The acting mission commander wore his tan Mars suit, his helmet in the crook of his arm and filled with a cache of small tools and equipment. The black hood from his suit's thermal layer covered his ears and shaved head. Julian paused, apparently not expecting to find others awake. He proceeded to the communal table and stopped at the far end, the one nearest the entrance. He

emptied his helmet onto its surface.

"Where are you off to?" asked Kate.

Julian rummaged through the pile of equipment, sliding items into the loops and pouches of his suit's utility belt. "Getting ready to head out," he said, while continuing to sort his tools.

None of the tasks they needed to complete that day had been handed out to any of the *Ares* astronauts. Julian had poor leadership skills, but would he really take an exterior assignment for himself, one of the coveted, few opportunities to walk on the planet's surface? "I thought we'd have a sign-up sheet for day-one duties, draw straws or something for the people who wanted—"

"Getting ready to head out with Cheney for our primary objective," said Julian, halting his packing to level a steady gaze at Kate. He resumed stuffing equipment into his belt.

The comment rendered Kate speechless. Regardless of the importance of Julian's "primary objective," whatever that was, they'd all be in trouble if they neglected day-one work items. "Our number one job right now is to get settled in—"

"We got settled in last night," said Julian, still engrossed in his packing.

"But we need to perform a visual inspection of the HAAB, both inside and out. We're not really able to settle in until we've completed all the steps of the cert—"

"You don't need me or Cheney here to do that," said Julian, looking up. "You might be scrambling until sundown, but the eight of you can definitely manage."

"There's a storm coming, Julian," said Miriam, the station chief jarred from her meditation.

"The one NASA was tracking before we arrived. It's a monster. The computer predicts it'll be here later this evening."

"Yes, I'm aware of the weather report," said Julian. "That's part of why we're going out there

now." He slid the last item, a compact, telescoping pickaxe, into a loop on his belt.

"Will you be close by?" asked Kate. "It's not wise to venture too far from the HAAB, not with the storm bearing down."

"All details of the objective, including our destination, are classified," said Julian. "There's nothing I can share with you about it."

"You can't tell us anything, even now that we're all here on the planet?" asked Miriam, incredulous. "You really think what you're working on will stay secret for an entire year?"

"It better," said Julian, "unless one of you has a Top Secret/SCI security clearance and a need to know."

"That's a military clearance," said Miriam.

Julian froze for an instant. He'd apparently revealed more than he intended. The secret assignment wasn't a NASA-driven shift in priorities after all. Julian and Cheney were tasked with a *military* objective.

"I didn't sign up to support some secret military op," she added. "I'm a pacifist."

"The only reason you're here on Mars, pacifist Miriam, is *because* of this op," said Julian, regaining his composure. "Or did you think the military and all those black-budget agencies chipped in six hundred billion dollars because they were feeling generous?"

"But why head out there now?" asked Kate. "We only just arrived. We're going to be here for a year—"

"The AD stressed to me the importance of our primary objective, and how I'm not to let anything stand in the way of completing it. In my judgement, that means setting out right now. If that storm turns out to be one of those freak year-long events, I can't return to Earth saying I

missed my one opportunity."

Julian was correct about Mars's unpredictable weather, dust storms that would engulf the planet. But those storms typically lasted a month, two tops, not a full year. The notion they'd be pinned down in the HAAB for their whole time there seemed excessive.

"Me and Cheney leaving now doesn't make a difference," said Julian. "You'll be focused on getting the station operational. You'll all be so busy you won't even notice we're gone."

"But if you get into trouble, we're the ones who'll have to risk our lives to come to your rescue," said Kate. "Like Miriam said, none of us signed up to support a secret military op. We're scientists and explorers, not soldiers."

"Glenn used to be a Marine," said Julian, hoisting his helmet to the light. He rubbed a smudge inside the clear ovoid. "You, Kate, you're an ex-Air Force pilot. I know for a fact you've been on missions, combat missions, where the objective changed right out from under you. That's how things go sometimes. It's why I know that what I'm saying isn't all that hard to understand." Julian lifted his helmet and rubbed the smudge again. "You need to stop worrying about what might happen to me and Cheney. I want you to focus on getting the HAAB into operational readiness—those are my orders for you, Kate Holman."

In that instant, Kate understood what had irked her so much about Julian during their trip to Mars. He'd carried himself as if *he* were the leader of the mission, not her. He'd merely paid lip service to her being in charge. In retrospect, his ascension to acting mission commander was no surprise. He'd simply bided his time until the announcement.

"Cheney and I will be back before the storm hits." His helmet cradled under his arm, Julian spun about and walked out of the DFAC.

Miriam and Kate sat a few moments in silence until the station chief rose. "I'll be in the control room." She grabbed her coffee mug and left.

Kate stared out the broad window, catching the first orange rays as they spilled over the faroff mountain ridge. The sun floated into the sky, smaller than on Earth, a white disc ascending against a red wash. She took another bite of her raspberry bar and tucked the rest in her jumpsuit pocket. The remainder would be her reward for making it through the day.

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"Commander Holman."
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"Go ahead."

"You asked me to keep you apprised of the storm."

"What's the latest."

"It's not good."

Kate stood in her Mars suit on a graded section of red soil in the shadow of the station's Greenhouse. Her eyes flew to the eastern sky. The mountain peaks visible in the early morning had disappeared, shrouded by a towering dark wall of ruddy dust.

"The storm's moving a lot faster than projected," said Miriam. "It'll arrive sooner than we thought."

Lightning flashed, its neon tendrils striking from the turbulent cloud tops. The static electricity signaled highly agitated dust particles in the atmosphere. The storm would pack a punch, but hopefully spare their electrical systems. "We're almost done out here," said Kate. "One more cell to inspect." She'd pushed Fisk and Voss to work quickly. Completing the HAAB's exterior qualification ahead of schedule would give them more time to help the others with the tasks inside.

"It's not you I'm worried about," said Miriam. "It's Julian and Cheney. When they left this morning, they thought they'd have 'til sunset to return. If they're shooting to be back by then, they'll be trapped in it for sure."

"Have you informed Commander Grimes?"

"That's just it—I can't raise either of them on their suit comms."

Commander Holman cursed softly. If they couldn't reach Julian over the comms, they'd need to find him on foot. She pulled a set of compact scopes from a pouch at her hip and trained them on the western horizon. Kate hunted for any sign of movement along the crest where the two men had dipped from view earlier that day. They'd been fools to venture out before the onset of a major storm, the hard stop of its arrival leaving no margin for error.

"Did they say where they were going?" asked Kate.

"No, ma'am, and they didn't file an excursion plan either," said Miriam.

No excursion plan, even under seal? At a minimum, his carelessness would draw a mandatory reprimand in his service record, though Julian seemed unconcerned with the rules in the Manual, or the repercussions from not following them.

"However, Cheney's suit pinged the basin relay tower for about an hour after they left," continued Miriam. "Probably an oversight, considering how secretive they've been."

The coordinates from those pings would reveal the route the two men took, at least up until the signal cut out. They'd likely discovered their mistake and silenced Cheney's suit. Kate swore a second time, her worst-case scenario beginning to play out. Julian's rash decision would put additional lives at risk. "Upload the data to my suit."

"Yes, ma'am," said Miriam. "But before you go off trying to find him, I'll point out that Julian's the mission commander. That makes him responsible for his own skin, and for Cheney's because he dragged him along."

"Acting mission commander," said Kate. "This is still my mission, Miriam. The AD might've

given it to Julian, but I'm gonna get it back, and when I do, I don't want it to come with a list of dead astronauts."

"Roger that," said Miriam, sheepish in her reply. Kate's response to the usually spirited station chief had more bite than she intended. "Data's coming your way."

Kate needed to wrap up her work outside. "Fisk, Voss." Their helmeted heads peeked from behind the Greenhouse. She waved them over.

The two astronauts showed up with expectant faces. Their suits were dusty orange, with pristine, tan rivulets where creases had kept the dirt at bay. Brick-red earth soiled their palms and knees. They'd spent a good portion of their time on the ground, inspecting the connection points between compartments.

"We calling it a day, Commander?" asked Fisk.

"No," said Kate. "I called you over because of the storm. It's coming in a lot faster than we thought. Julian and Cheney are still out there. I need to warn them so they can head back in time."

"That's no problem," said Fisk. "Voss and I are old hands at this now. We can close it out on our own."

Kate addressed Voss. "I want you to finish qualifying the Greenhouse, and then head in to coordinate completion of the interior integrity checks."

"Should go quicker, at least," said Voss. She'd spoken under her breath, but the suit comms had amplified the comment.

"I didn't catch that," said Kate. Irritation had prompted Voss's remark. The question was why.

Voss brought herself to attention, apparently not expecting her comment to have gone beyond her helmet. "I guess I haven't understood why you've been out here, directing me. And Fisk."

Wasn't the reason obvious? "This part of the HAAB's qualifications needs to go right; otherwise, we're all living and sleeping in a structure that could fail. We could all die. That would end this mission pretty quick."

"We both know I'm fully capable of supervising the external qualifications on my own," said Voss. "I don't need someone watching over me. It feels a little like you don't trust me to do my own job."

The commander wasn't normally one to micromanage, but everything needed to go perfectly with the HAAB's qualifications, especially as she was now angling to reclaim the title of mission commander. In her zeal to regain her position, she'd stepped on the mercurial station engineer's toes.

Voss took Kate's silence as her cue that the conversation was over. She made a motion to go but stopped herself. "Oh, and regarding the genius professor here," she said with a nod towards Fisk, "please don't leave him with me. I've never met a grown man who could complain so much about so little. Frankly, I prefer wine with my dinner, not while I'm working." She whirled about and set off for the far side of the Greenhouse. Fisk, confused for a moment, started to follow.

"Mission Specialist Fisk." The professor froze mid-stride. He looked sheepishly back at the commander. "You're with me," said Kate.

Fisk crinkled his nose, incredulous. "I'm with you where?"

"I can't go searching for Julian and Cheney alone," said Kate. "I need someone to come with me."

"And you're saying that someone is me?" asked Fisk. Kate nodded. "What about Voss? You didn't even check if she wants to go."

"I need Voss to oversee the work inside," said Kate.

"I can do that," said Fisk. "I have a whole lab of grad students back home. I'm very good at telling people what to do."

"Voss is also the HAAB's engineer," said Kate. "We can't risk losing her searching for Julian and Cheney."

"But we can afford to lose me?" asked Fisk.

Kate shook her head and walked away. Every moment she wasted arguing with Fisk was a moment longer they risked getting caught up in the storm themselves.

Fisk's bootsteps crunched over her suit audio as he scrambled to catch up. He pulled alongside her. "What about Glenn? Or Engles?" he asked.

"They would be excellent, *dependable*, choices," said Kate. "Problem is, it'll take too long for them to drop what they're doing and get suited up. By the time they come out, we could be halfway there already."

"Where's 'there'?" asked Fisk.

"Wherever Julian and Cheney are," said Kate. "Miriam sent me a trail for us to follow—"

The crunch of Fisk's boots ceased. "I respectfully request to remain here at the HAAB," he said.

"Request denied," said Kate, without looking back. She activated her suit nav and fed the coordinates from Cheney's tower pings. A green trail materialized across her faceplate, stretching to the horizon on a due west heading. She set off on the glowing path, with Fisk again

scrambling to catch up.

The terrain turned rough beyond the manicured earth around the HAAB, featuring rocky outcrops that resembled a mad artist's attack on sculpting clay. Red silt, some coarse, some fine-grained, covered the flatter surfaces and lined the crevasses.

"Is that...?" asked Fisk ten minutes into their trek. He stooped and examined something near his boot. "It is!"

"It is what?" asked Kate, maneuvering for a sight of whatever the fuss was about.

"Mudstone!" said Fisk. He crouched, brushing his gloved hand over large, flat blocks of dark stone. "This means standing water existed here for quite a while. You don't get this kind of sedimentary layering without an extremely long time period for the silt deposits to solidify."

Kate studied the rocks. They appeared to be nothing out of the ordinary. "Let's keep going." She began walking. The professor eventually followed, leaving his find.

"Look at this!" said Fisk minutes later. "Shale!" He crouched and grabbed a section of thin, flat rock that jutted from an outcropping. A fragment snapped off in his hand. "It's incredibly fissile." Fisk offered the shard for the commander's inspection. "This forms when minerals settle out of an aqueous suspension." He set a knee down—

"Fisk!"

The scientist jumped to his feet and stood rigid, like a child caught being naughty.

"We don't have time for a geologic tour," said Kate. "There will be plenty of opportunities for that *after* we find Julian and Cheney."

"Aye, aye, Captain," said Fisk. He banged his hand against his helmet with an awkward salute.

"You're not an officer, so don't try to salute me," said Kate.

"Aye, aye, Captain," said Fisk.

"And this isn't the Space Force, so don't 'aye, aye, Captain' me."

"Aye, aye... I mean yessir."

"It's ma'am."

"Yes, ma'am," said Fisk. "And I'm sorry. My whole life is rocks. I hope you can understand the excitement of walking on a planet's worth of stone that no one has ever explored."

"I get it, Fisk," said Kate. "We just don't have time right now."

Kate continued plotting a careful path along the jagged landscape. The rugged terrain soon quieted, opening onto a broad section of rolling land littered with rocks that ranged from pebbles to small boulders. Farther west, the ground sloped gently downward, forming a shallow bowl-like depression. At the bottom, they shuffled through a stretch of fine red silt so deep it covered their boots. Perhaps the remnants of a long-dead lake.

"By the way, Commander, where exactly are we going?" asked Fisk. Flashes of light played on his face as his nav received the route from Kate's suit and rendered it on his heads-up display. "Oh, you have *got* to be kidding me," he said.

"What?" asked Kate.

Fisk laughed. "OK," he said, "of course. Of course!"

"What are you talking about?" asked Kate, growing annoyed.

"This trail we're following, where it's leading us—it ends not five hundred meters from the Face."

"The face of what?" asked Kate.

"The Face on Mars," said Fisk. "I *told* you this secret black op is about retrieving alien technology."

"You don't really believe that, do you?" asked Kate. "In aliens, I mean, carving a giant stone face on Mars, pointed up to the sky?"

"Photos don't lie," said Fisk. "The photos in question came straight from the Viking 1 flyover in 1976."

"Did you attend the briefing on those images, the ones of the Face and the nearby 'pyramids' and all the other supposed structures in Mars's so-called city of Cydonia?"

"I didn't want my mind polluted with disinformation," said Fisk.

"You mean you didn't want to sit there for two hours while they methodically debunked all those claims of aliens on Mars."

"It's case closed, then," said Fisk. "Like I told you, all these governments, including ours, are in the business of claiming aliens don't exist so they can keep their discoveries to themselves."

"You really think there's something to the original Viking lander images?" asked Kate. "Those lo-res images certainly show what looks early similar to a human face, but NASA analyzed the heck out of them. In the end, they proved the Face is just a rock formation."

"They didn't *prove* anything," said Fisk. "That 'analysis' was a snow job, and a pretty bad one at that. Someone ran the original image through a bunch of filters 'til they got a photo with all the detail washed out."

"Subsequent images taken with higher resolution cameras showed the Face to be a completely natural rock outcrop," said Kate.

"The camera that took those photos was built under contract by a company whose owner is

an avowed Face skeptic," said Fisk. "Somehow, he was also the lone person NASA assigned to process all the camera data *before* revealing it to the world. So no, I don't trust the higher-res data either."

"You're telling me the Face is real," said Kate.

"I think it hasn't been proven otherwise," said Fisk. "And the problems with the official explanation don't help. I also found it very interesting how they had a meeting to debunk all the theories, but not two weeks later, they revealed they were placing the HAAB three kilometers from the Face."

"I don't remember them telling us we'd be that close."

"That's 'cause they never uttered those words," said Fisk. "In fact, they were very careful not to let on about the Face being nearby. Do you remember the satellite photo where the HAAB's location was marked with one of those upside-down teardrops? When you have a point of interest like that, you center it in your photo. Do you recall how the teardrop was down in the lower-left corner? That's because if they had centered it, we would've seen Cydonia off to the left."

"Yeah, I do recall that," said Kate. "The teardrop being off-center struck me as strange. I figured they wanted to show the major land formations to the east."

"Did you know that wasn't even where NASA wanted to put the HAAB?" asked Fisk.

"What do you mean?"

"I have a buddy, a friend from my undergrad days at Princeton. He used to work ... let's just say somewhere within the military industrial complex. He's a little bit paranoid, but his information is always spot-on. When I told him where they were setting us down, he said there

had been a whole back-and-forth between the military and NASA over where to place the HAAB. Did you know NASA wanted us near the equator? There's more sunlight, the temperatures are not as extreme, and the planet spins faster there, which makes rocket liftoffs easier. The military nixed that plan—they threatened to pull the funding. So here we are, above the fortieth parallel."

The deep dive into Fisk's conspiracy theories strained the limits of Kate's patience. "All this talk is hurting my brain," she said. "Can we focus on following the trail for now?"

"Of course, Commander. We don't need to discuss everything today." He grinned. "We have an entire year."

Kate stifled a groan as they trudged forward. They traveled through more rugged land that gradually shifted to a smooth plain of long-dried mudflats. Red dust filled the arterial network of cracks between the clods. After twenty-five minutes, they stopped for a break, sipping water from their suits' reclamation systems. The Face loomed ahead, though too far to discern any significant details in the hazy distance. The commander fixed her scopes on the formation. She couldn't say much about the top, but from the side it appeared to be a flat-topped mound of striated rock. "For all the claims of intelligent design, it doesn't look like anything special to me," she said. "It's just a mesa."

Fisk snatched the binoculars and studied the Face. He remained quiet for once. Apparently, the scientist *could* be silenced; it just took facts he couldn't dispute, ones that came from his own eyes.

Kate glanced back at the HAAB, its gleaming white cells and tubeways silhouetted against the advancing storm. "Let's move," she said.

The two resumed their march. On their left, a small sandstone mesa, river-carved according to Fisk, rose from the flat plains. Cheney's path paralleled the gentle curve of the formation's pitted rock face, steering them progressively southwest. After twenty more minutes of walking, they reached the dot at the end of the green nav line.

"This is where the trail cuts out," said Kate.

Fisk didn't respond. He stared at the Face, agape. What had been a mythical alien carving in a grainy photo was now in full view, a massive assemblage of sedimentary rock whose natural origins were clear and indisputable.

Kate switched her suit comm to the broadcast channel. "Julian, Cheney, this is Commander Holman. Do you read?"

A low hiss fed back over the comms.

"Julian, Cheney, do you read me?"

More gentle hissing.

"Now what?" asked Fisk.

"I'm not sure," said Kate. She'd figured they'd have a good chance of contacting the men once they arrived at the end of the trail. The commander eyed the lightly rising terrain between them and the Face. "Maybe if we're on higher ground."

Kate led Fisk up the shallow slope, a stretch of smooth rock with a network of hairline cracks. They paused at a ridge line where the land dived for thirty meters, then flattened out in the final run to the base of the Face. The immense sandstone structure towered in front of them, nearly a kilometer high.

A roughly round, black patch, situated at surface level, interrupted the red and orange

striations that marked the side of the Face. Kate removed her scopes and scanned the feature. "Looks like there's an opening in the rock."

"You mean a cave?" asked Fisk.

"Something like that." By her scopes, the opening measured two meters wide and three meters high at its tallest point. She couldn't make out any details within the deep black—the cavity had to extend a good ways into the rock.

"That's where they are," said Fisk.

"You don't know that," snapped Kate. Fisk talked as if relaying a well-known fact, but his claim was based on nothing at all. "You have no idea where they are. You're only guessing they even came this way. They could have easily headed off in any other direction at the end of Cheney's trail."

"Oh, they're definitely in there," said Fisk. His eyes widened, the geologist entranced by his imaginings. "The Face *is* an alien edifice. And we just found the way in. NASA must've discovered artifacts, weapons or technology, spoils so compelling they sent a live astronaut extraction team."

Contacting the men would end the debate and get them started back home. "Julian, Cheney, you copy?" Their vantage point on the ridge provided kilometers of visibility in almost all directions. The Face was the exception, though with luck, reflections would bounce the signal around it. If the two *Ares* astronauts were nearby, they should've picked up her transmission. Nothing but the faint hum of a silent connection filled the channel.

"You can't reach them from here," said Fisk. "All that red in the rocks is rust, iron oxide. The ferromagnetism creates an electromagnetic shield the comms can't penetrate." His jaw went

slack with more imaginings. "Besides, they're probably in a vault room—no telling what exotic material it's made of."

Kate muted Fisk's channel, giving herself space to think. Even if the two men ignored her hails, the comms would still show a connection lock. Julian and Cheney weren't anywhere on the open plains or were too far away to worry about trying to help.

The clock on her heads-up display nagged. Kate looked back to the HAAB, its network of cells hidden behind the smaller sandstone mesa. Clouds at the storm's leading edge floated high in the eastern sky, spitting lightning against a roiling dark gray backdrop of dust. "We'll go down and take a look inside that opening. If we don't make contact, we'll start back." She didn't want Julian and Cheney to die, but she could only do so much to counter stupidity. They'd spent enough time trying to save their asses. "C'mon," she said, stowing her scopes and starting for the Face.