



Illustrated by Eldar Zakirov

# Next Frontier

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## Rosemary Claire Smith

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We stand today on the edge of a New Frontier ... the frontier of unknown opportunities and perils, the frontier of unfilled hopes and unfilled threats. ... Beyond that frontier are uncharted areas of science and space, unsolved problems of peace and war, unconquered pockets of ignorance and prejudice....

—John Fitzgerald Kennedy  
Presidential candidate  
July 15, 1960

On this fine November day in 1967, Natalya Orlova took the oath to become a citizen of the United States, thereby clearing her last hurdle for acceptance into the astronaut training program. After nearly three years of giving her all to NASA, today should have been one of the happiest days

of her life. If only Tomas, and their little Pasha, could have celebrated with her. Instead, Natalya returned to Merritt Island alone.

Striding toward her hard-earned place atop the roof of the Launch Operations Center, she caught sight of the sorrow and yearning on Pete Conrad, Wally Schirra, and Alan Bean's faces. She'd begun working with these three aviators soon after her own desperate race down dark cobblestoned streets of Paris. Today, their eyes, like hers, were fixed upon Launch Complex 39 where the mighty Saturn V perched, with Apollo 4's command module sitting empty.

Only once had Wally Schirra spoken to Natalya about the launchpad fire. As backup for Apollo 1, Schirra had trained with Gus Grissom, Ed White, and Roger Chaffee. Schirra had been at the Cape that January day watching what should have been routine preflight tests, before catching a T-38 flight back to Houston with his buddies. Instead, he'd witnessed seventeen seconds of tragedy. Then came fifteen minutes of ghastly silence before the confirmation of what everyone already knew. Schirra's words echoed in Natalya's mind today: "We always expected to lose at least one mission before we reached the Moon. But we never expected it to be on the ground."

Now, Schirra shifted to make room for Natalya, and Bean followed his example. Conrad, the chief mischief-maker among the rocket-boys, narrowed his startlingly blue eyes a fraction when he glanced at her and grudgingly made space. No doubt catching her momentary dismay, Schirra murmured to her, "Don't let him get to ya, kid." He'd taken to calling her "kid," as though she were his younger sister, which Natalya found reassuring.

Bean nodded toward the Saturn V. "Isn't she something?"

Schirra's voice caught. "I bet she'd take you on one heckuva ride." He was the only one of them who spoke from experience atop a Titan II.

Here she was today, almost halfway around the world from her homeland, thirsting for a launch as stirring as Vostok 5 and Vostok 6. How she'd cheered when those rockets fought their way upward from the sweeping Kazakh Steppe, upward into orbit. Back in 1963, she'd bought into Comrade Korolev's assertion that American capitalists had nothing but "weak, puny rockets." That had been her fellow Ukrainian's first lie, although it hadn't hurt her like his empty promise to see her orbit Earth.

At noon on the dot, Mission Control completed countdown. A gold-orange-brilliantly-white pillow of fire ballooned out, blasting Apollo 4 upward. Shouts of joy burst from all their throats as they collectively willed the majestic rocket to rage against gravity and pierce the sky. "Go, go!" Natalya bellowed, hardly caring when the building beneath her feet began shaking. A split second later, sound waves from the launch swept over the ops center, pummeling her. She stood gaping at the fast-diminishing rocket before turning to the screen to celebrate the first-stage separation and presently the second.

Bean switched on his thousand-watt grin. "We're back on track, baby!"

"What a doozie!" a jubilant Conrad replied as the men slapped each other's backs.

Natalya smiled to think how Pasha would have giggled in delight at that Americanism, "doozie." Her smile faltered.

Moments later, Apollo 4 pierced the upper cloud layer, and there was nothing more to see. Yes, the United States was undeniably back on track. After nine trying months—a seeming eternity in the Moon Race—during which the Kremlin boasted of docking two remote-controlled spacecraft, the Americans had rethought, reconfigured, and retested. Today's uncrewed flight featured the type of launch vehicle NASA expected to use for its Moon shot. Natalya permitted herself a measure of optimism about her own prospects, albeit as carefully rationed as Soviet medicine.

"Orlova, c'mon," Wally Schirra held his cupped hand to his mouth and tipped his head back in the universal gesture for drinking. "Going to tip a few. For Gus and Ed and Roger." Conrad and Bean had each lost a friend from their astronaut class. She caught the fleeting surprise on Conrad's face at the invitation into their tight circle. Bean stood poker-faced, his gaze flickering between Conrad and her.

Natalya wanted to draw back, having endured Conrad's pressed lips and stubborn silences, which went beyond his "concerns" she wasn't "a team player." He doubted her renunciation of

Communism and Socialism, maybe even suspected her of being a foreign agent. Naturally, she couldn't divulge to him the information she'd brought along regarding Star City's capabilities and timetables.

And then there was the indisputable fact that she was female.

*I could tolerate him better, she thought, if Chief Designer Korolev hadn't lied by promising me the Soyuz circumnavigation of the Moon. What did it matter that I scored at the top in the physical, mental, and psychological tests? Or that I completed the most parachute jumps? Or that I was the best woman pilot in the cosmonaut training program? After Valentina Tereshkova's remarkable solo orbit of Earth, Korolev had no further use for female cosmonauts.*

Now, as Schirra held the door open for Natalya, Conrad motioned impatiently to her and said, "Unless you're ready to concede!" Bean guffawed. Was this a crack in the ice sheet of Conrad's attitude toward her or merely another test?

*Ill "tip a few," Natalya thought, in Pasha's name. She matched Pete Conrad's confident grin with one of her own. She wasn't about to let this U.S. Navy aviator, who stood two inches shorter than her, think he could out-drink her. Not when it came to American "booze" as they called it, and especially not when it came to vodka. Stashed downstairs were two bottles of Ukraine's finest, which she'd taken when she escaped.*

"Challenge accepted." She strode through the doorway.

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For the first six months of 1968, rumors about prospective crews for upcoming Apollo missions zoomed between NASA installations faster than naval aviators could fly. The "smart money" wasn't on Natalya. She kept her focus on training, testing, and improving her fluency in English. Then in August, two months after Bobby Kennedy dodged an assassin's bullet and barely a week after he claimed his party's nomination for president, Natalya's fortunes shifted.

The discontent in the NASA Co-Administrator's office felt more palpable than anything Natalya ever experienced in Star City.

Jacqueline Kennedy's commanding brown eyes held the gaze of the entire room. Nobody could mistake NASA's codirector for a figurehead. Having ably served as ambassador to France following her husband's death, she'd received widespread acclaim for her years running the Peace Corps. Next, she'd maneuvered LBJ into naming her codirector of NASA together with Deke Slayton. "Gentlemen," she said, "six years ago, my late husband told everyone that it won't be a single person going to the Moon, but rather our entire nation. He knew that to succeed in sending a rocket 240,000 miles to the Moon, and bringing our brave astronauts home safely, we must be bold. He meant more than new technologies and extraordinary precision. President Johnson and my brother-in-law Bobby are 100 percent on board."

A couple of division heads, the P.R. man, and Pete Conrad shot one another covert glances, but mostly the posse looked to Deke Slayton to assert his heretofore inviolable prerogative of assigning astronauts to upcoming missions. If they'd had their way, he'd be NASA's sole director.

Slayton ran a hand over his buzz cut. "Damned Russkies got Valentina Tereshkova into space five years ago. They won that round fair and square. What's the point of us putting Orlova or any of the ladies through their paces? NASA doesn't need the distraction. I don't see us sending any of 'em up. Physiological factors make it inadvisable."

Natalya gripped the arms of her chair as this powerful American man echoed the Chief Designer's "truth" about women's hormones or chromosomes making them unsuited for space. Korolev had faulted Valentina Tereshkova for her physical exhaustion, constant nausea, and insomnia aboard Vostok 6, which prevented her from conducting several scientific tests. As if any male cosmonaut performed flawlessly! While being paraded around the globe, lauded for heroism, and showered with awards, she was privately demeaned, thereby sinking the prospects for all female cosmonauts. That's when Natalya secretly began learning English and looking for opportunities to escape. She said not a word to Tomas, who would never have agreed to it. And now, after losing her son, after giving up her husband, after leaving behind her whole life, here she sat at the Cape listening to the same "truth."

Then the debate veered from the way it had played out in Star City.

Jacqueline Kennedy tapped her Cross pencil against a thick binder filled with test results and psych evaluations. Heads swiveled toward her. “Not according to our in-house assessments, Deke. Besides, the Soviets disposed of that tired argument with Tereshkova’s mission.”

Natalya scrutinized the earnest faces around the room, knowing something they didn’t: The Kremlin’s publication *Pra vda* would have proclaimed Tereshkova’s flight a wild success no matter what. “*Pra vda*” was Russian for “truth.”

Jacqueline Kennedy pressed on. “Our support-ops engineering teams are enthusiastic. Women consume less air, less water, less food.”

Slayton grumbled, “Less consumables mean less fuel. I get it.”

“Might be pickier about the taste,” Pete Conrad put in. This was met with smirks and chuckles.

Natalya spoke up. “I never enjoyed that luxury in Ukraine or Star City.” One of her earliest childhood memories was being very hungry and keeping silent while hiding beneath a mattress. Not that the U.S.S.R.’s victory in the Great Patriotic War ended drought or famine in Ukraine.

Slayton was undeterred. “I’m concerned about the physical challenges and protecting the ladies.”

*Protecting the ladies*, Natalya thought. *Where were chivalrous protectors when Jacqueline Kennedy and her husband sorely needed protecting in Dallas? Or when my son needed a competent doctor?* She said, “During eighteen hours of labor when I had my son, I was given nothing for pain except aspirin and vodka.”

The men shuffled, uttered a nervous cough or two.

Kennedy seized on Natalya’s point. “Our premier medical team already determined that women are better equipped than men to handle the physical stresses of weightlessness.”

Slayton switched tactics. “We’d have to fabricate a special spacesuit to fit a woman’s body.” His hand rose to sketch a curve. At Kennedy’s raised eyebrows, he abandoned the gesture. “Frankly that’s another complexity our design team doesn’t need. Not at this late date in the Moon Race.”

The Moon Race—it always came back to that. The fear of losing terrified these Americans. The Kremlin continued to pile up victories, not only pulling off a historic soft landing of the uncrewed Luna 9 on the Moon, but also sending Luna 10 into orbit around the Moon.

Then something happened, something that had never—could never—take place in Star City, or anywhere inside the U.S.S.R. Mouth set in a grim line and eyes flashing, Jacqueline Kennedy rose to command everyone’s undivided attention. “Which company has the contract to design and fabricate spacesuits? Hmm? Who is gluing layer upon layer of silica cloth, heat resistant fibers, woven stainless steel, and the like? Any guesses?”

“Playtex,” Deke Slayton muttered. His cohorts winced, but he didn’t give up. Arms akimbo, he said, “How will they relieve themselves in zero gee?”

Natalya kept her voice neutral. “Valentina Tereshkova managed it.” *You don’t care*, she thought, *that NASA’s training facilities lack a convenient ladies room. Wally Schirra stands guard for me outside the men’s room.*

“What will it say about Yankee ingenuity,” Kennedy asked, “if we let something this pedestrian defeat us?”

Pete Conrad lodged the next objection. “What about those Mercury 13 female pilots? Doesn’t one of them deserve a fair shot, if any of the ladies do?”

Natalya worked to mask her double aggravation at the notion that there could be only one slot for “the ladies” and getting undercut by her “drinking buddy.”

“Fair question,” Jacqueline Kennedy replied. “Orlova’s test scores eclipse theirs. For that matter, she’s got every man in our astronaut corps beat, with one exception. Neil Armstrong. I say we go with the best we’ve got.”

A thrill sprang up inside Natalya. She knew she’d done well, but not how well. Even so, her heart went out to the Mercury 13 women whose hopes were to be put on hold yet again.

Now the men in the room—those competitive souls—began scrutinizing her as if they might

divine how she had pulled this off.

"I grant you she's a rock-steady aviator with top scores," Slayton said. "So why did the Soviets pass her over in favor of Tereshkova?"

"I grew up in Ukraine, and she's Russian."

"Korolev's Ukrainian," said Slayton.

"He wasn't willing to take the unnecessary risk," Natalya replied. Her devotion to Tomas and four-year-old Pasha could have easily been twisted into an insufficient dedication to Socialism and her working-class comrades. "If I was ever accused of bourgeois nationalism—"

Slayton cut her off. "Reportedly, you drank too much in Star City, where you were hardly a team player."

"Schirra, Conrad, and Bean can tell you I know how to hold my liquor." She stole a glance at Conrad's poker face. He hadn't demanded a rematch.

"Is it possible, even likely," said Kennedy, "that Korolev disliked an educated, self-assured woman? One who racked up more accomplishments than many men vying for cosmonaut duty? And if drinking were a disqualification, neither the U.S.S.R. nor the U.S. could muster half a squadron."

That produced knowing chuckles all round.

Kennedy pressed on. "The Soviets sent the first woman into orbit. Deke's right. We can't erase that. Now let's top them with the first woman to perform an EVA."

The first to walk in space! Natalya hardly dared believe it, especially when Conrad's blue eyes narrowed and Slayton sputtered in disbelief. Thankfully, the public relations fellow nodded, scribbling something on a clipboard. "I can work with this," he proclaimed.

Kennedy closed the discussion with a firm, "This isn't a debating society. I suggest all of you worry about your own jobs and let me worry about mine."

Several men—thankfully not every man—glanced at Deke Slayton, silently beseeching him to overrule her. He said nothing. The decision, made above his pay grade, would stand.

As the meeting broke up, Jacqueline motioned for Natalya to stay behind. After everyone else filed out, she said, "Your selection might be the single most significant decision I've made since embarking on this co-directorship with Deke."

"I'll do my best, Ma'am."

Jacqueline Kennedy fixed her intense gaze upon Natalya. "I need you to understand exactly what you represent and why it's critical. Bobby has to win big with women voters. Do you realize what a disaster Richard Nixon would be? He's out to destroy the domestic programs my husband worked so hard to launch." Scowling, she crossed her arms. "And here I was furious with Johnson for taking credit for Jack's 'New Frontier,' even renaming it 'the Great Society.' Well now I don't know which would be worse: watching Nixon cut off our hopes of reaching the Moon, or claiming credit for my husband's greatest accomplishment!" She gestured in frustration. "Worse yet, Nixon's a small-minded war monger who terrifies me."

Natalya nodded cautiously, having learned long ago not to voice a political opinion.

Jacqueline Kennedy closed the distance between them. "Why did you push to become a cosmonaut?"

*Here it is,* Natalya thought, recalling Comrade Korolev's expression as he'd almost stumped her with the question, "Why do you like flying?" She opened her mouth, then paused, conscious of the seconds passing and nevertheless fearing her hesitation would be mistaken for caginess.

"To be in the air," she replied, the same direct answer she'd given the Chief Designer. He had smiled then, for he was an engineer and said, "Right, it's as simple as that." Now, all she could do was hope that Jacqueline Kennedy, with her political instincts and zeal to see her husband's lofty goal fulfilled, would recognize and value truthfulness. "Becoming a cosmonaut was not what anyone expected of me." This drew a knowing grin from the woman who'd headed up both the Peace Corps and NASA. "I knew it would be challenging. I hoped it wouldn't be too hard on Tomas and Pasha because it was something I had to do." She'd heard nothing from or about her husband after getting away. U.S. intelligence agencies refused to disclose whatever

they knew, leaving Natalya to wake at night guilt-ridden.

“Ah, your family. Was it difficult for your son to cope with your long absences and the risk?”

This American leader, Natalya recalled, had a girl and a boy of her own, both deprived of their father at a tender age. Did her children come to her sobbing the way Pasha had when he grew barely old enough to fear that one day Mama wasn’t ever coming home? “Like any Ukrainian child, he knew bad things can happen with little warning.”

Jacqueline’s mouth quirked. “It’s no different here. My children learned that lesson much too early.” Bitterness crept into her voice. “My husband’s political enemies held my own flying lessons against me.”

“You fly?” At first, the idea startled Natalya, but then it made sense for this daring woman with her penchant for the unconventional.

Jacqueline crossed to the window and looked skyward. “I piloted a Cessna when we were first married. How Jack loved my ‘sense of adventure’ . . . until he didn’t.” She clutched her arms. “How he worried every time I climbed into my plane—a capable two-seater, utterly reliable. How he hugged me and buried his face in my hair when I landed.” The widow’s bitter laughter reminded Natalya of Tomas’ round face filled with worry. Jacqueline went on, “The life of a newly-minted senator’s wife must be governed by decorum. Jack’s advisers insisted I stop flying. When I was expecting Caroline, I gave up my own sky. Instead, I took Jack’s dream of space and made it my own.”

*A sensible strategy, Natalya thought, but one that had failed miserably at insulating Jacqueline’s children from loss.* “That must have been hard. You have my thanks and gratitude for everything you’ve done on my behalf . . . for believing in me when others do not.”

“Don’t concern yourself about the rocket-boys, with their focus on responsibility, equipment, aeronautics, and liquor. What I told them goes for you too, Natalya. You worry about your job and let me worry about mine.”

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After weeks of navigating journalists, pundits, and politicians bent on attacking her inclusion in the first crewed mission since the Apollo 1 fire twenty months ago, Natalya stood suited up in the White Room at Launch Complex 34. She had the satisfaction of knowing her place aboard Apollo 7 was anything but a cheap political stunt to boost Robert Kennedy’s chances of victory. Beside her, Wally Schirra and Donn Eisele began their farewell phone calls to their families waiting over at the launch ops center. Very soon the three of them would don helmets and clamber through the hatch.

Schirra clutched the handset to his ear. “You mind your mother. . . . I love you, too. . . . You better believe it. . . . Soon as I get back.” The moment was simultaneously intimate and necessarily public, even if it admitted of no chance to straighten a shirt collar or tuck an errant lock of hair, much less collect a last kiss or whisper in his wife’s ear.

What would it have been like if Natalya hadn’t lost most of her family to both sides during the Great Patriotic War, or if she could enjoy much the same conversation with her Pasha? Four years ago, she had set her irrevocable plan into motion—her one chance, a trip of a few kilometers to the U.S. embassy in Paris, a trip subject to as many vagaries and hazards as today’s impending rocket launch. Would she have chanced it if her son hadn’t already succumbed to a chest infection? The cavalier attitude of the Star City doctors toward little Pasha’s choking, gasping end firmed Natalya’s resolve. Her frayed marriage to Tomas had broken the day she blinked freezing tears in the bitter wind as the small, sad coffin was lowered into the ground with nary a priest or prayer to accompany her no-longer high-spirited boy. Never again could he beg her to fly him to the Moon.

Precisely on schedule, Schirra’s and Eisle’s families were herded upstairs to a prime viewing spot atop the Launch Operations Building. A month ago, Jacqueline Kennedy had asked Natalya, “Do you understand why we give our astronauts’ wives and children this?”

“A gesture of respect?” she ventured. “In recognition of their sacrifices, large and small.” Respect had been as closely rationed in Star City as medical care. Thank goodness NASA, unlike the Politburo, wouldn’t hesitate to call a halt barely three weeks before the November election,

which pollsters pronounced a nail-biter, rather than risk their astronauts' lives for the sake of political expediency. Nonetheless, there could be no guarantees.

The director's lips twisted. "Call it compassion mixed with pragmatism, not in equal parts. If the worst happens, the families are out of the clutches of the press. The public will never witness their grief. Not on my watch."

Natalya bit her lip. These wives would never find themselves immortalized on dreadful, grainy film like Jacqueline Kennedy scrambling over the back of that convertible in Dallas, trying to retrieve her husband's brain matter. This was a gift of mercy, a gift from a widow.

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The first stage practically rattled Natalya's teeth out of her gums. But it ended too abruptly when the second stage gave them an unexpected early kick like the honey-pepper vodka from her homeland. She kept her eyes on her instrumentation. Nothing appeared amiss.

MISSION CONTROL: Apollo 7 you're looking good.

SCHIRRA: We copy, Houston.

Natalya let out a breath. *Von Braun, that hateful Nazi, certainly knew his rocketry.* Soon, the ride smoothed out like Ukraine's best vodka combining pure well water with soft winter wheat. Then they floated weightless. She joined Schirra and Eisle in laughing while soaking up the dream of a lifetime.

"Just wait, kid," Schirra said. "It gets better."

Mercifully free from nausea, she discovered he was right. Several days into the mission, just before her EVA, Natalya paused to gaze out the open hatch and marvel at the landscape passing silently below without the least rush of wind or other physical sensation of speed. Eastern Europe stretched out, gleaming in brilliant sunshine. A streak of white clouds, like droplets of spilled milk, spread across Ukraine. Natalya's breath caught at the first sight of her homeland in four years. The countryside looked placid from orbit. Invisible scars ran deep three decades after her village suffered through Stalin's Holodomor followed by war, then drought and more famine.

She kept her reactions to herself. Thanks to advances in communications, people around the globe were watching this mission more closely in real time than previous ones. Neither Natalya nor NASA needed added attention placed on her foreign birth or her life in a Soviet Socialist Republic for twenty-nine of her thirty-two years.

MISSION CONTROL: You're clear to go through the hatch.

ORLOVA: First step looks like a doozie!

No, this wasn't what she'd practiced saying when making history as the first woman to walk in space. She had no time for regrets. While her words were replayed around the world, Natalya focused on performing the tasks she'd drilled and drilled. With her umbilical tethering her to the spacecraft, muscle memory kicked in. She moved as deliberately and smoothly as she had during underwater training, thankful for technological improvements in mobility since the first EVAs. It was so quiet out here without the capsule's whirs and hums that she could hear her heartbeat.

The trickiest of her tasks proved to be seemingly the simplest—retrieving the micrometeorite collector. The problem wasn't her spacesuit, which fit well despite Deke Slayton's purported concerns. But Natalya's small hands struggled inside the custom-designed bulky, clumsy gloves. When her first two efforts came to naught, her memory served up Korolev's scornful face as he denigrated Valentina Tereshkova for failing to complete a basic scientific task.

SCHIRRA: Let it go, Natalya. Time to get inside.

ORLOVA: I almost had it. One more try.

She steadied herself and began again. Finally, she managed to detach the device. The slow, deliberate motions of her return to the command module came naturally, for she had little desire to get back inside before she absolutely must. With a smooth motion, she handed the micrometeorite collector to Schirra, who waited suited up with his arms stretching out from the hatchway. As Natalya floated in headfirst, a pang of sadness mingled with relief and pride.

Evidently reading her expression, Schirra said, "If you could see the look on your face, kid.

Reminds me of Ed White when he told me about pulling himself back into the capsule. ‘Saddest moment of my life.’ Those were his words.” This was Schirra’s third time in orbit.

She sighed. “One of the saddest, certainly.” *Especially if my adopted country loses interest in sending women into space.*

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Natalya paused at the open door to Jacqueline Kennedy’s office, knowing how the co-director valued promptness but reluctant to interrupt the raised voices inside.

“Next thing you know,” said Deke Slayton, “you’ll be clamoring for some woman to land on the Moon.”

“And why not?” Jacqueline shot back.

“What could any of the ladies know about walking on the Moon?”

“Not one male astronaut knows a thing about Moon-walking, either. But at least women won’t try to swagger in one sixth gee.” Catching sight of Natalya, Jacqueline motioned her to enter.

Several newspapers rested on the coffee table, one headline proclaiming, U.S. BACK IN SPACE RACE and another blaring, APOLLO 7: WHAT A DOOZIE! With the U.S.S.R. mum, acclamations resounded across the United States and around the globe at Natalya’s achievement in becoming the first woman to walk in space. For Americans, it took much of the sting out of Valentina Tereshkova’s 1963 orbit. But the consternation filling both directors’ faces drove away Natalya’s pleasure.

Nobody invited her to sit. Instead, Jacqueline got right to the point. “Your success hasn’t deterred zealous anti-Communists from insisting that you’re a dangerous ‘KGB spy’ who duped the CIA. They’re positive you’re out to sabotage Apollo.” She uttered a frustrated laugh.

Deke said, “Naturally, they know nothing about the extensive investigation into the smallest details of your life. We’d hoped suspicions would die down given time. Instead, we’ve received multiple threats of violence against you.”

Natalya’s alarm competed with indignation. After upending her life and giving the U.S. every iota of information gleaned during her time in Star City, she hardly dared look at him as she asked, “Does this mean I’m off the program?”

“What?” said Jacqueline. “Not at all. However, NASA cannot allow you to take unnecessary risks. You are barred from drinking at the local watering holes.”

Natalya looked into her mentor’s luminous eyes, picturing the discussions undoubtedly leading to this decision, and reading finality.

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The bone-chilling January wind sent icy spears into Natalya’s face, conjuring frozen memories of the bleak Kazakh Steppe. She wiggled her fingers, appreciating the superior warmth of Western gloves. Blinking away frost, she gazed out upon the enormous and jubilant crowd, filling the expanse from the steps of the U.S. Capitol clear to the Washington Monument and beyond. Many of these joyful Americans had grown up and gone far away to fight, but even they knew nothing of battles shattering their towns and their families within their homes. And yet, how remarkable to find herself one of a handful of astronauts chosen to witness the installation of the nation’s next president. From her place among the dignitaries, Natalya had a clear view of the man. His thatch of hair only partially hid the ugly scar, the legacy of the assassin’s bullet grazing his skull last June. Despite that, Robert F. Kennedy cut a fine figure standing with his mother, his wife, and their children as he was sworn in.

This Kennedy brother had pulled off a victory by the skin of his teeth, with Nixon conceding days later. Next came the anxiety-filled wait until NASA got word that Bobby Kennedy would make good on his private promise to retain his prominent sister-in-law and Deke Slayton as Co-Administrators. Scuttlebutt inside the agency said the decision had been delayed not because he particularly cared about cries of nepotism but rather because he longed to shield his brother’s widow from the unrelenting criticism by naysayers who claimed she was ruining NASA and jeopardizing the Moon Shot. They never leveled such charges against Slayton.

In his inaugural address, the new leader invoked his brother’s famous promise “to land a man on the Moon and bring him safely to Earth.” Robert F. Kennedy’s voice swelled with ambitious

confidence when he said, "As we explore the far reaches of space, let us journey to the new worlds together—not as territories to be conquered, but as a bold adventure to be shared. Not only the Moon, but the planets are truly our next frontier. The Solar System is a frontier properly shared among all the peoples of the world. Let us go forth side-by-side."

Natalya's breath caught. Could he really mean travel to Venus? Mars? Farther? She hardly dared hope.

Later came an evening of inaugural balls. To her surprise, Natalya was escorted to an ornate ballroom filled with Kennedys and other VIPs. Jacqueline took her elbow and steered her between a gang of Kennedy children playing tag, so like the games Natalya had played at that age whenever grown-ups had let children come out of hiding. And what her own child could be playing if . . .

Reaching a quiet corner, Jacqueline said, "I wanted to get ahead of the rumor mill. You're slated for a lunar mission. Naturally, not Apollo 11. Deke insists on giving two of our military men the glory of going first. The president agrees. Next comes Apollo 12 and you'll be LM pilot! Congratulations! Don't look so surprised. You've earned it."

Natalya could scarcely believe it. "Thank you!" She scrutinized her powerful and polished mentor, finding openness and earnestness, altogether unlike Comrade Korolev. He'd encouraged her to be patient when he undoubtedly knew the Kremlin had no further use for female cosmonauts after Valentina Tereshkova. Now, despite performing well aboard Apollo 7, this opportunity must be driven, in part, by American leaders' desire to rub their enemies' noses in her success.

Jacqueline continued, "Alan Bean will be command module pilot. Pete Conrad will be commander."

Natalya gulped at the prospect of serving under Conrad, then forced herself to say, "He's a capable, experienced aviator." Notwithstanding their titles, Conrad would perform the real flying if necessary during their automated approach.

Jacqueline placed both hands on Natalya's shoulders, looked her in the eye, and adopted a reassuring tone. "Remember, you have more experience than Bean. He's never been in space. Conrad is everything you could want in a commanding officer."

Words deserted Natalya.

"John," Jacqueline snagged her son by the arm as he raced by. "Come here. I want you to meet an astronaut."

He looked around eight years old, this boy with the Kennedy cowlick. About a year younger than Pasha would have been now. John stopped pulling away. Mouth agape, the world-renowned child scrutinized Natalya. "*Her?* What about you, Mama? When are you going to fly me to the Moon?"

A pang seized Natalya at hearing the child ask the very question Pasha had peppered her with, half a world away.

Jacqueline's face grew wistful as she smoothed her son's hair, not succeeding with his cowlick. "You're too little," she said, echoing Natalya's response to Pasha.

"Mama, you *always* say that." Whirling away, the boy plunged back into his cousins' game, leaving Natalya trembling with memories and aching bitterness.

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Across America and around the world, people gathered to witness the July 1969 launch of Apollo 11. Thousands braved the Cape's miserable, stormy weather that morning to cheer on Neil Armstrong, Buzz Aldrin, and Mike Collins, packed into their command module, *Columbia*, high atop a Saturn V. Every astronaut at the Cape was glued to the screen, including Natalya Orlova, Pete Conrad, and Alan Bean. When the rain diminished to a drizzle and the countdown resumed, spirits lifted at the sight of the engines firing, followed by the rumbling roar of the liftoff from Launch Pad 39A. Walter Cronkite praised "the mighty rocket fighting to break free from the surly bonds of gravity in humanity's heroic effort to reach the Moon." People could hardly wait to watch two brave astronauts emerge from their LM, which they'd named "Liberty," take the first steps on another world, and plant the flag.

What a heartbreaker.

It was a perfect launch. For the first thirty-six seconds. Then came Neil Armstrong's puzzled voice, broken up by patches of static.

ARMSTRONG: I don't know what the hell happened . . . in the world drop out . . . three fuel cell lights . . . AC bus lights out.

MISSION CONTROL: I'm not sure but you may have been hit by lightning.

ALDRIN: I lost . . . More warning lights . . . oh man.

The screen revealed little except rainclouds.

"About ninety seconds to fix it or abort," Conrad muttered. Bean pressed his lips together. Apollo 11 approached six thousand miles per hour. NASA had never resorted to an abort after launch, not before now. Natalya's spine went cold at the prospect.

MISSION CONTROL: Apollo 11, make that two lightning strikes.

ARMSTRONG: Roger, Hous . . . short of some . . . screens are dark. All . . . fuel cells offli—

MISSION CONTROL: Apollo 11, try setting the SCE aux switch to aux, over.

The crackle of static was the only response. Critical seconds ticked away. On TV, a grave Walter Cronkite rustled papers, placed a distracted hand on his earpiece.

MISSION CONTROL: Apollo 11, try setting SCE to aux. . . Neil, do you copy? Over.

Houston repeated the instruction several more times, but the static continued without letup.

MISSION CONTROL: Neil, Buzz, Mike, prepare for automated abort. I repeat, prepare for abort. Over.

The expressions around the viewing room showed the astronaut corps' collective dismay at the prospect of an automated abort while sitting atop a rocket carrying over a million liters of liquid hydrogen and even more liquid oxygen. Walter Cronkite began an explanation of the procedure in which Launch Ops decoupled *Columbia* from *Liberty* before taking the CM into a controlled splashdown in the Atlantic.

Along with much of the country, Natalya stayed glued to the TV, gulping Maxwell House and Anacin, as Navy helicopters searched choppy seas. At last, there came a brief-but-jubilant report that they'd sighted the capsule bouncing right-side-up in the waves. Long minutes passed before frogmen tied their raft onto the capsule.

*Columbia*'s hatch swung open. Cheers swept through Merritt Island as a pair of Navy SEALs reached inside to help Neil Armstrong emerge, wearing a weak smile. The cheers soon turned to groans at how he cradled a broken arm. Buzz Aldrin came out next, clutching his forehead, blood streaming down. Mike Collins, shaken but uninjured, was last.

\* \* \*

Two weeks later, the U.S.S.R. achieved a stunning success when its N-1 booster rocket sent the newest Soyuz capsule into lunar orbit with two cosmonauts (both male) aboard. In October, NASA's high-powered board of inquiry, having toiled around the clock, completed its investigation into Apollo 11's failure, concluding that the double lightning strikes knocked out instrumentation. Thus, Apollo 12 remained on course as America's last chance to land on the Moon before the end of the decade.

Natalya dreaded mandatory press conferences these days, despite her growing proficiency in English. They gobbled up heaps of time, leaving her drained. Invariably, reporters demanded her response to charges that she was a Russian agent, an ignorant, insulting label, given her Ukrainian heritage and everything her people endured at the hands of Russians. Not to mention the personal risk inherent in her leap to freedom. Even inside the Ops Center, she caught occasional glances when someone thought the foreign interloper wasn't watching, piled on top of a refusal to meet her eye or a false smile.

After work one day, Alan Bean coaxed Natalya into going for beers with him and Pete Conrad. She'd spent long hours training with both men. Her steady, methodical approach to unexpected scenarios meshed well with theirs, enabling her to gain their trust and vice versa. They'd even enjoyed a few lighthearted moments, like when Conrad attempted to show off his swagger in a full spacesuit, notwithstanding its bulk. The constraints on his range of movement sent him toppling backward, legs splayed. Nonetheless, today's invitation—the first since their

assignment to Apollo 12—felt like a welcome milestone. As they hoisted their third bottle apiece, Conrad said, “Tradition calls for the crew to name the Command Module and the Lunar Module. Alan and I have chosen *‘Intrepid’* for the CM.”

Bean shifted uncomfortably as the look in Conrad’s eyes practically dared Natalya to challenge the choice. Showing irritation at the gratuitous snub would get her nowhere. Besides, it could have been worse. At least they hadn’t selected *‘Columbia 2’* to commemorate Apollo 11’s ill-fated attempt. She took a gulp before nodding. “*‘Intrepid’* is a fine name.”

Conrad said, “I wasn’t asking for your—” Bean elbowed him sharply. Conrad hurried on, “We picked *‘Eagle’* for the LM. Deke’s already signed off.” He slapped his thigh, again daring her to object.

Natalya’s anger flared, only to burst out as a full-throated laugh at Conrad’s ignorance. Both Americans looked mystified. She took another swig of beer while calming herself. “You really don’t know?” They shook their heads. “In English, ‘Orlova’ means ‘Eagle.’”

Now it was Bean’s turn to guffaw at Conrad’s dismay. His laughter was cut short when an aide rushed into the dive bar, spotted Natalya, and practically dragged her to Jacqueline Kennedy’s office, leaving Conrad and Bean with worried expressions.

*This is only a minor infraction*, Natalya told herself as she entered the office. NASA’s co-administrators stood glaring at each other. Slayton barely glanced at her before saying, “Jacqueline, there’s a heckuva lot more at stake now than with Apollo 7. I’m trying to protect NASA’s reputation.” He held up a hand to forestall objections. “The newspapers are already screaming, ‘NASA TO SEND KGB SPY TO MOON!’”

“After what happened to my husband?” Jacqueline’s voice shook with anger. “To think that—of all people—I would be in cahoots with the KGB! Or duped by them?”

“Look, we both know how many things can go awry. It only makes sense to head off a headline like, ‘SOVIET MOLE SABOTAGES U.S. MOON SHOT!’”

*He’s kicking me off Apollo 12*, Natalya realized, *even knowing I’m no spy! He’s reasserting exclusive authority over mission assignments*. She fought to keep calm. *What can I say? These ignorant conspiracy theories still cling to me. Maybe they always will.*

How terrified but hopeful she’d been at the 1965 Paris Air show. On that neutral territory, under the watchful eyes of their official minder, several cosmonauts, including Natalya, had met Neil Armstrong and Wally Schirra. She couldn’t help but take heart at the astronauts’ enthusiasm for the three-stage Vostok rocket, the same type that carried Yuri Gagarin beyond the atmosphere. Through interpreters, the space pioneers talked and exchanged toasts, focusing on their commonalities: flying test planes and living in the sky, transfixed by the great promise of space. With an enthusiasm startling the hard-drinking American astronauts, Natalya had matched them at chugging beer and tossing back pepper-laced vodka. Before long, the old matron monitoring her had downed a goodly quantity, too. That night, Natalya seized her one chance to reclaim her dream. At three A.M., she stuffed Pasha’s picture and two bottles of vodka—the only bribe she could offer if necessary—into her coat. While her minder lay snoring, Natalya crept out. Relying on a hastily memorized map, she scuttled over Parisian cobblestones to the U.S. embassy where she spoke her first six words of English: “Help me, please. I seek asylum.”

Now, Jacqueline spun to face her. “Can you ignore the latest nonsense and do your job?”

“Yes, Ma’am. Always. You both know the truth about me.”

“We do. You already proved you have what it takes.”

But Slayton wasn’t done. “It’s past time to get the president on board.”

Jacqueline had to agree.

Soon, President Kennedy reaffirmed his support for keeping Natalya on Apollo 12. Publicly, he stated, “The United States has devoted enormous resources to demonstrate that our technological superiority fundamentally rests upon the superiority of our ideology. I’ve seen for myself that our new citizen, Natalya Orlova, fully embraces our core American values.” Privately, his message to NASA was terser: Anything that increases the likelihood of losing the Moon Race is not an option.

Natalya knew she must set aside provocations. She vowed to work with Conrad as seamlessly as she could.

\* \* \*

Every step of the Apollo 12 mission, from the November 14th launch on a beautifully clear morning, to the four-day trip to Moon, to the Lunar Orbit Insertion burn, had gone as planned. Yes, there were times in their close quarters when Conrad was short with her. Or with Bean or with Houston, she observed. Taking it personally would be counterproductive, especially on the cusp of the next major challenge after decoupling the Lunar Module from the Command Module—the automated descent to the Moon’s surface.

CONRAD: *Eagle’s* undocked.

MISSION CONTROL: Roger. How does it look?

CONRAD: A-Okay.

ORLOVA: Earth is straight out our front window.

MISSION CONTROL: You’re go for landing.

As Walter Cronkite narrated in tones of cautious optimism, millions watched and wavered between awed enthusiasm and fingers-crossed anxiety.

ORLOVA: 2000 feet.

CONRAD: Program alarm. It’s a 1202. Executive overflow No VAC Areas.

MISSION CONTROL: Roger. 1202 alarm . . . Verifying . . .

ORLOVA: 1600 feet.

MISSION CONTROL: We traced the 1202’s cause. *Eagle’s* computer overloaded. Autopilot is taking you off-target.

ORLOVA: 1300 feet. There’s not enough time to reset the autopilot. If Pete assumes manual control, I can guide us down.

Conrad’s eyes widened. He scrutinized her, weighing his call. Natalya had confidence in his capabilities . . . and her own. The seconds stretched.

CONRAD: Houston, she’s one heckuva navigator. Let’s do it.

MISSION CONTROL: Go ahead, *Eagle*.

Conrad set the LM to zero pitch, slowing their descent. Looking through scribe marks on her window, Natalya determined the landing point designator to guide them back toward the Sea of Tranquility.

ORLOVA: 1000 feet, 21 feet per second, 33 degrees.

At 700 feet another problem arose. Below them lay a rubble field strewn with boulders the size of Volkswagens, some larger. Any of them would tear *Eagle* to shreds. Conrad gave a low whistle.

MISSION CONTROL: Sixty seconds.

CONRAD: It’s too rocky. How’s the fuel?

ORLOVA: 8 percent. Slow it down.

CONRAD: Okay. We need a smoother tarmac.

ORLOVA: 11 forward. Coming down steadily. I’m guiding you over that crater.

MISSION CONTROL: Roger.

ORLOVA: 160 feet, 6.5 down, 9 forward. Looking good . . . 120 feet . . . 100 feet, 3.5 down, 9 forward.

MISSION CONTROL: 60 seconds of fuel.

CONRAD: That does look like a better area if I can reach it.

ORLOVA: Five percent fuel remaining. 75 feet. Down a half, 6 forward.

And then Natalya saw it—their final touchdown spot.

ORLOVA: Steady on. I found us a good spot. 40 feet, down 2.5. Three percent fuel remaining.

At 30 feet, the LM started picking up left translational velocity and backward velocity, which meant Conrad couldn’t see where they were heading. He arrested it with spasmodic control motions, but not entirely. He couldn’t slow their descent rate any further, not with the fuel almost empty.

MISSION CONTROL: *Eagle*, 30 seconds until we abort. Over.

## ANALOG

*To abort when they were so excruciatingly close!* NASA procedures placed this decision in the hands of the mission commander. Conrad looked at her. Natalya gave him a thumbs-up.

CONRAD: Copy that, Houston. I can make it.

ORLOVA: 4 forward. Drifting right. Twenty feet down. Picking up dust.

CONRAD: Almost there.

ORLOVA: Drifting forward. We're running on fumes. . . . And contact.

CONRAD: Okay. Engine Stop.

ORLOVA: Engine off.

CONRAD: Houston, reporting from Tranquility Base. *Eagle* has landed.

MISSION CONTROL: *Eagle*, we copy you on the ground. You had a bunch of folks about to turn blue. We're breathing again. Thanks.

BEAN: Congratulations, Pete. Congratulations, Natalya.

Conrad wiped several beads of sweat from his forehead.

\* \* \*

As the hatch swung open, *Eagle* cast a shadow on the dusty lunar surface.

CONRAD: Okay, Houston, I'm on the porch . . . About to come down the ladder.

MISSION CONTROL: Roger, Pete. . . . We see you going down. Over.

Half a billion people stared at the ghostly images beamed from a camera mounted on the LM.

CONRAD: I'm at the foot of the ladder, about to step off.

MISSION CONTROL: We copy.

Pete Conrad lowered his left foot.

CONRAD: That's one small step for an American, one giant leap for mankind.

Watching Conrad's boots sink a couple of centimeters into fine dust, Natalya blinked in surprise. He'd actually spoken the words NASA had scripted for him!

WALTER CRONKITE: Look at that! Pete Conrad is on the Moon. Wow.

CONRAD: It's a brilliant surface in the sunlight. The horizon seems closer than on Earth. What an interesting place to be. I recommend it.

WALTER CRONKITE: Thirty-nine-year-old astronaut Pete Conrad is standing on the surface of the Moon on this November 19th, 1969.

Seventeen minutes later, Natalya was ready to step into the history books. Coming through the hatch, she caught her breath.

ORLOVA: Beautiful view.

CONRAD: Isn't it a dazzling sight?

ORLOVA: Dazzling wasteland.

Placing her booted feet carefully on each rung, Natalya made her descent. She paused at the third rung from the bottom to look at Conrad's boot prints.

CONRAD: There you go.

ORLOVA: That's no small step,

CONRAD: About a two-footer, with a soft landing.

She'd observed Conrad's descent while filming it from inside *Eagle*. He was correct on both counts. Good. She concentrated on taking this step while speaking the words she wanted to say—her own truth—not the trite words Deke Slayton had urged on her, not the marginally better words Jacqueline told her came from President Kennedy himself, and least of all the untruths Comrade Korolev would have forced from her lips years ago.

ORLOVA: That's a single step for a woman, a giant leap for all people.

Her boots sank softly into lunar dust.

WALTER CRONKITE: Natalya Orlova is standing on the Moon. Look at her—the first woman and the second person to stand on the Moon!

Natalya's footprints mingled with Conrad's. Buoyancy helped carry her to his side by the plaque mounted on *Eagle*'s landing gear.

WALTER CRONKITE: We have placed two Americans on the Moon: one was born in our country and the other is a newly minted citizen. They stand together at the base called "Tranquility."

CONRAD: Houston, I want to read from a plaque on the lunar module.

MISSION CONTROL: Go ahead, Pete.

CONRAD: It's a message for those watching, and those who may make this journey one day: *"Here people from the planet Earth first set foot upon the Moon November 19, 1969 A.D. We came in peace for all mankind."*

The next order of business was planting flags. They each carried an anodized aluminum tube holding a nylon flag. Conrad led the way with a mincing two-step necessitated by low-gee.

"You finally perfected that swagger," Natalya joked as she kicking up fine dust with her own bouncing walk.

Chuckling, Conrad picked a location where the flags wouldn't succumb to the exhaust wind from liftoff. Natalya held the pole steady as he pounded it into lunar regolith with a rock-sampling hammer, affixed the horizontal bar, and unfurled the Stars and Stripes.

CONRAD: This flag celebrates our national achievement. We make no claim of sovereignty over the Moon.

Her turn came next. With Conrad steadying the second pole, she hammered it in place, then slipped off the outer casing and unfurled the banner. Harsh sunlight shone upon twin olive branches surrounding a white map of the world on a sky-blue field. The United Nations flag featured practically the same blue field as Ukraine's forbidden former flag. Natalya's breath caught at this gleaming symbol of all people. *I planted this on the Moon!*

Pete Conrad, Alan Bean, Walter Cronkite, and NASA waited silently for Natalya's words. So did the world.

ORLOVA: Years ago, when I first thought of stepping upon the Moon, I pictured many things. But never . . . never did I imagine my native land represented here. Today, a world away from humanity's home, I plant this flag on behalf of every human being in the Universe.

MISSION CONTROL: Pete, Natalya, Alan, the President of the United States wishes to say a few words to you. Over.

CONRAD: That would be an honor.

MISSION CONTROL: Go ahead, Mr. President.

PRESIDENT ROBERT KENNEDY: Hello, Pete and Natalya. Hello Alan. I'm talking to you from the Oval Office. This must be the most historic phone call ever made from the White House. I can't tell you how proud all Americans—and people everywhere—are of what you've done.

CONRAD: Thank you, sir.

Before reentering the LM, the astronauts each took a few private moments to leave mementos behind. In a sheltered spot between two rocks, Pete Conrad placed a family photo as well as a patch commemorating his fallen friends aboard Apollo 1, especially Ed White who'd trained with him in the heady days when they'd shared the honor of being chosen for NASA's second group of astronauts, but also Roger Chaffee, who'd been Alan Bean's buddy in the third group. When her turn came, Natalya set down a fading photo of John and Jacqueline Kennedy, looking self-assured and impossibly young as they posed in front of Jacqueline's Cessna. Then she took out her one picture of Pasha, which she wouldn't have dreamed of surrendering. Instead, she traced his name in the lunar dust in Cyrillic. Beneath it, she wrote his name in English.

"Mama brought you to the Moon, my darling."  
\* \* \*

Thus far, NASA had gotten so many aspects of the mission very right. Arranging for astronauts to sleep in the Lunar Module wasn't one of them. Weight constraints precluded cots, or even hammocks. They each sought out an almost comfortable perch or bit of deck although they couldn't stretch out, lest they disturb any of the bundles of wire not behind a protective panel. Nor could they take off their liquid-cooled suits. Conrad took the spot on the engine cover and Natalya settled down on the deck.

"Pete, I wanted to say thank you."

"For what?"

"Giving me this chance."

"Don't get ahead of yourself, Natalya. We're not out of the dazzling wasteland, yet."

"I might not have time later to thank you."

"You should thank Schirra and Bean. They told me I'd be a knucklehead to object to you."

*It's as close to an apology as he'll get.* "I never would have flown with you, Pete, if I didn't have confidence in you, too."

He fell asleep almost immediately while Natalya listened to the system noises, stared at the window shades glowing from the brilliant sunshine outside, and tried to will away her excitement-induced adrenaline.

JFK's words echoed in her ears. *Bring them safely home to Earth.* For all their insistence on having their cosmonauts' best interests at heart, this was an ethic not genuinely shared by Koroлев or the Kremlin. *Everything I've accomplished in my thirty-three years, she realized, will be enough. I've taken a single step hoping to spur a giant leap for international cooperation, not solely with the U.S.S.R., but globally. Cooperation in space isn't inevitable. Suspicions get transmitted like contagions from citizen to citizen, from comrade to comrade, from CIA agent to KGB agent, and back. And yet, if this journey proves to be my last, it will be enough.*

Houston woke her from a light doze when it was time for the pre-ignition checklist. At the appointed time, Conrad initiated lift off. The ascent and rendezvous went smoothly with Mission Control and Alan Bean ably guiding them, and Natalya making minor adjustments. Presently, the two vessels locked together with a welcoming clunk and thud. Not until that moment did Natalya allow herself to give in to a surge of unalloyed joy.

"What a doozie!" Conrad sported an enormous grin, his blue eyes gleaming. "Great flying with you, Natalya. Let's catch our ride home."

\* \* \*

Safely deposited on board the *U.S.S. Hornet* and encased in a silvery airstream-trailer-turned-quarantine-facility, the three adventurers donned sky-blue flight suits. Then Conrad surprised Natalya by taking a bottle of Ukrainian vodka from a cabinet. The good stuff—supposedly not available in the U.S.

"Natalya, Alan, here's to our next flight!" Conrad tossed back a shot, and the other two followed suit. Natalya savored his words almost as much as her homeland's finest.

They sat shoulder-to-shoulder as Bean pushed aside the window curtain. The band struck up Hail to the Chief. President Kennedy strode down the red carpet toward them, accompanied by his brother's widow, both grinning nonstop.

The president began by saying, "After spending the past week in communal anxiety and hope, I applaud the magnitude and precision of this endeavor. I've received calls and congratulations from kings, presidents, sultans, rulers of over two billion people. Your success links us in friendship with people throughout the world. I'm the luckiest man alive to welcome you home to Earth after your magnificent adventure."

"Thank you, Mr. President," Conrad replied. "We're deeply honored that you came all the way out to the middle of the Pacific to greet us."

Natalya's turn came next. "The biggest moment of my life was when, on behalf of people everywhere, I touched a world beyond our own. Now I'm pleased to be back on our home world."

Alan Bean spoke last. "Some will wonder how I feel about traveling all that way and not setting foot on the Moon. I'm happy with the seat I had and thrilled with having brought my brave friends safely home. From lunar orbit, I contemplated the infinitesimally small confines of our craft and the infinitely large backdrop of outer space. Seeing the Earth from the Moon was far more impressive than seeing the lunar landscape. The Earth was a tiny blue-and-white orb with a smear of rust. It's our home: the whole show. Its fragility was unexpected."

An ebullient Walter Cronkite pronounced it, "a rarity in human affairs: a total success and a credit to the human race."

\* \* \*

Twenty-one days later, Jacqueline Kennedy led the Apollo 12 astronauts on a world tour. Everywhere, they were greeted by enormous crowds and extensive news coverage. One sentence summed up the festive atmosphere: Humans walked on the Moon.

To wild applause, Pete Conrad always stepped forward first in true rocket-boy fashion, having resumed his swagger. Natalya and Alan Bean followed, raising their joined hands overhead as if to embody American optimism in all its bittersweet glory. Gazing at the madly cheering mob, she wondered, *Is this how Valentina Tereshkova felt? No wonder Korolev envied her. To think I've lived my truth! Oh but do I dare believe I've returned to a world where good things are now more possible? How tempting it is to pretend that somewhere in this surging sea of faces I might glimpse Tomas or my little Pasha.*

“What comes next?” people shouted.

Without hesitation, Jacqueline answered, “We transform NASA into the International Space and Planetary Agency. ISPA, for short. President Kennedy invites all nations to join our efforts.”

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*Analog regular Rosemary Claire Smith has had science fiction, fantasy, and horror in Amazing Stories, Fantastic Stories, and various anthologies. Her interactive adventure novel, T-Rex Time Machine, is available from Choice of Games. She draws on her background as a field archaeologist to create alternate pasts. She's been blogging at <https://rcwordsmith.com/blogging-the-mesozoic/> for at least 156 million years. Follow her on Twitter or Instagram @RCWordsmith.*