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Луна, Лайка и Носферату
Original Cover & Logo design by Junya Arai + Bay Bridge Studio

In Compile Cosmonaut

NOVEL



written by Keisuke Makino

ILLUSTRATED BY
KAREI



Seven Seas Entertainment

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by Keisuke MAKINO
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Illustration by KAREI
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Characters Луна, Лайка и Носферату

■ LEV LEPS: Humanity's first cosmonaut. Air force colonel.

Training Center vice-director.

■ IRINA LUMINESK: Vampire and world's first cosmonaut. Lieutenant colonel.

Training Center instructor.

■ **VOLKOV:** Director of Space Science Research Center at Zirnitra's

National Institute of Science.

■ **SLAVA KOROVIN:** Spacecraft and rocket development chief.

Currently comatose.

■ LT. GEN. VIKTOR: Lieutenant general and Training Center director.

Hero of the Great War.

■ XENIA KOROVINA: Korovin's daughter.

■ BART FIFIELD: ANSA engineer. Member of Arnack One.

■ KAYE SCARLET: Dhampir prodigy employed at ANSA.

Member of Arnack One.

■ NATHAN LOUIS: Head of ANSA's astronaut training facility.

■ **ODETTE FELICETTE**: Dhampir and astronaut.



United Kingdom of Arnack

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CAPITAL: ERIKSON, D.E.

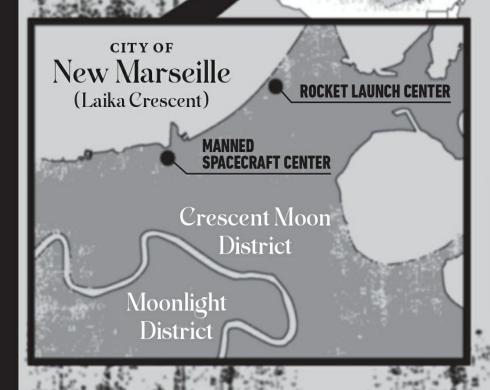
EXPO GROUNDS:
MARINE CITY

The United Kingdom of Arnack

ROCKET LAUNCH CENTER

AERONAUTICAL
RESEARCH CENTER

IMPRISONED ISLAND







Everyone watched the beginning of the voyage with great fervor. The ship's officer gave the signal: *Blastoff!*A cannon fired a giant bullet carrying a crew of scholars, which immediately disappeared into the depths of space.

Picking up speed, the bullet flew ever closer to the moon. The moon, in turn, grew ever larger.

It seemed huge. Gigantic. Then...

The bullet quite suddenly struck the moon in the eye!

It was a crash landing!

With great joy and delight, the scholars stepped onto the unknown world.

Far off on the horizon, Earth slowly rose into view.

Thus, the scholars found themselves bathed in a most wondrous light.

—From the film A Trip to the Moon (1902)

Chapter 1: Project Soyuz Begins

Indigo Eyes

• очи индиго •

THE MAJESTIC GLOW of sunset flooded the office of the Zirnitra Union's first secretary, Fyodor Gergiev, as Lyudmila addressed him.

"From the beginning of time, the world's never been ruled by a single nation," she told the supreme leader icily. "You understand that, don't you?"

"Mm..."

Lev and Irina were appealing directly to Gergiev about the importance of cooperative development with Zirnitra's rival, the United Kingdom of Arnack. They'd told him such cooperation would be integral to a manned lunar landing. Gergiev had signed off, but for better or worse, he was mercurial—so Lyudmila was raking him over the coals to ensure he didn't waver.

To that end, she began lecturing him again. "The greedy and wealthy inevitably lose hold of their luxuries and meet their demise. You and our nation are walking that very path. You'll hoist yourself on your own petard, indulging your desire to make Zirnitra the 'first nation to achieve global dominance,' as you put it. The tables are already turning for both you and the country, and that stems entirely from your failures. Isn't that right?"

She'd put Gergiev on the spot; he couldn't deny it. "Uh... Mm." He sat before her, looking like a robot programmed only to nod.

Lyudmila flashed him a reassuring grin. "You aren't completely out of options yet. You can stave off disaster by joining forces with the UK. That'll end the rivalry sapping Zirnitra's national power, and you'll still lead one of two superpowers that control the world—East and West. Well?"

Lev watched Lyudmila manipulate the supreme leader, thinking back to what the woman had said in the basement of the Delivery Crew's headquarters. Unity between the UZSR and UK was just the first step toward her ultimate goal: dismantling the UZSR to reconstruct it as a Wondrous Wonderland.

She paused, rolling a colorful candy along her tongue. Her next statement hammered another nail into Gergiev's heart. "Even if we achieve a manned lunar landing, we won't earn any prize money, and there's not much chance we'll acquire any new, unknown resources. We haven't even developed the technology to install a military base on the lunar surface. So why would we pour exorbitant sums of money into the endeavor?"

"Well, to beat the United Kingdom," Gergiev muttered.

"Uh-huh. Still, moving forward with our current plans wouldn't yield much more than space dust. Correct, Lev?"

Lev nodded gravely. "The Chief gave up on them ages ago. The current project schedule is totally unrealistic. It won't put Irina or me on the lunar surface."

Three pieces of technology would be indispensable to a manned lunar landing, Lev explained: a "CSM" (command and service module) to take the cosmonauts to the moon, a lunar module permitting them to land, and a large-scale rocket to launch both modules into space. If even one of the three was faulty, the lunar landing attempt would crumble.

Zirnitra's problems started with the C-I rocket currently in development. If they constructed it successfully, the UZSR stood a chance at a manned landing —but they lacked the budget to complete the rocket, and Chief Designer Slava Korovin himself had harshly criticized the C-I as "entirely impractical."

If they completed the C-I, the UZSR would still have to wrangle with the lunar module, which posed its own problems. First and foremost, it would apparently be impossible to finish before the decade ended due to two factors: underfunding and stubborn insistence that the module feature an autopilot system.

Developing a lunar module was far more complex and challenging than anyone had expected. Scientists had never before planned to land a crewed vehicle on a celestial object with different gravity, and since they'd calculated

the lunar module's weight based on the estimated specs of a completed C-I rocket, the project was dead in the water.

It felt as if the C-I and lunar module were national pets gorging themselves on the country's budget.

The UZSR had one chance left—Korovin's plans for the Rodina spacecraft. The UK had launched a large-scale rocket successfully, but their CSM was still incomplete. That was where Rodina came in; it could serve as the service module the UK desperately needed, so long as certain prerequisites were met.

"Before we go ahead with any plans for cooperative development, we've got to clarify a few things," Lev explained to Gergiev. "First of all, the Chief devised this plan over a year ago. We have to determine whether it's still feasible with both nations' current technology. Intelligence reports tell us that the UK's struggling to complete their lunar module. Moreover, we don't know whether they'll agree to cooperative development in the first place. Their space program's been on hold since their last fatal accident, and their plans aren't clear."

"Hm..." Gergiev's murmur was utterly weak.

"At any rate," Lyudmila said coldly, "we'll go ahead and look at the Chief's proposal?"

"By all means," Gergiev replied. "The space program's my last stronghold."

The Space Age had kicked off in 1957 with Zirnitra's historic launch of the world's first satellite—a glorious, uplifting moment for Gergiev. Successive failures had followed that launch, and in just a decade, he'd plummeted back down to Earth. Now the supreme leader was little more than a puppet controlled by Lyudmila and whatever organization she worked for.

Lev was determined to walk his own path under any circumstances. He didn't care how completely others gave in to their greed and ambition to control the nation. All that mattered to him was moving the project forward. If the nation's senior officials were going to use him as a pawn, he intended to use them in kind. He knew all too well that, if he didn't, he'd end up just like Gergiev—crushed, wilting, and on the verge of being sucked dry.

The young cosmonaut believed steadfastly that cooperating with the UK would improve Zirnitran society. He also championed the space program for Irina's sake. Lev knew she was disdainful of the corrupt UZSR authorities, but he was ready to play their game to get her to the moon alongside him.

Once they'd finished badgering Gergiev, Lyudmila had orders for Lev and Irina. "Now it's your turn. I'll set up a press conference for you two to talk about *Howling at the Moon*. We need to settle the commotion."

Twenty government-approved journalists attended Lev and Irina's press conference at the Neglin. Lev and Irina sat front and center, ready to publicize their opinions of the book.

The UZSR had banned *Howling at the Moon*, an exposé of the Zirnitran space program's inner workings in which the nation's own mythical "chief designer" unveiled a plan for cooperative development. Zirnitran authorities promptly confiscated and incinerated the book upon discovery. Anyone with a hand in publishing or distributing the volume also had to watch out for the Delivery Crew, known officially as the Committee for State Security.

In spite of Zirnitra's domestic reaction, *Howling at the Moon* had been republished in numerous languages and was still spreading around the globe.

Lev spoke first at the presser. "This despicable, illegal publication contains a collection of falsehoods about the space program penned by rebels and traitors. We mustn't take it seriously."

Those words did not come easily. Lev himself had a hand in writing *Howling at the Moon*, and now he was condemning the volume in a confident, powerful voice. Furthermore, he was pinning its publication completely on a friend, accusing him of the crimes of incitement and civil defamation.

"Former engineer Franz Feltzman concocted those lies," Lev continued.

"Feltzman lost his position due to negligence and has long begrudged all of us in the space program."

His heart ached. Franz had already been executed with no chance to clear his

own name. It was true that the engineer had attempted to assassinate Irina, but he'd been in no position to refuse the order. Franz himself never wanted to kill her. Following Lev's demotion, he and Franz had passionately discussed their dreams of space and the stars above. Franz had always supported Lev's aspirations to become a cosmonaut.

Now Lev sacrificed Franz to the cause, essentially kicking his corpse in the process. He did so very reluctantly; he'd been prepared to sacrifice himself, and right now, he should've been a hunting dog with his teeth deep in the government's neck.

Tamping down his frustrations and regrets, Lev continued playing the injured party. "The cosmonaut team's supervisor, Comrade Lt. Gen. Viktor, is furious."

Sacrificing Franz's reputation would also spare Viktor's life. The Delivery Crew had taken the team supervisor into custody and interrogated him, but they eventually released him with a strict warning. Viktor dying in an "unforeseen accident" at this point would surely draw suspicion. That was also why Viktor wasn't demoted. After *Howling at the Moon*'s publication, the government wanted to create the impression that the space program remained entirely unchanged and unfazed.

The extent of the cover-up depressed Lev, and taking part pained him, but he wouldn't show his feelings in public. The man selected by the government as history's first human cosmonaut instead continued to let cloying lies slip from his lips, virtually coating himself in their sickly-sweet honey. "My comrades," he said. "The people disseminating this book must be stopped!"

Lev imagined that if his parents were watching the press conference, they might be thinking, *He's just become another member of Zirnitra's top brass.*

He lambasted himself in his heart, but he kept the act going onstage. "Given the space program's classified nature, I can't make further statements regarding the illegal publication's accuracy," he warned the gathered journalists. "That said, the national statement contains everything you need to know."

When Lev finished, it was Irina's turn to address the sections of the book that discussed vampires. "Howling at the Moon states that the space program

classed Nosferatu personnel as test subjects and shrugged off their deaths on the grounds that they weren't human," she said, voice cold and face expressionless. "That's untrue. The so-called Nosferatu Project is also a fabrication. I applied to the space program of my own volition. I'm indeed nonhuman, but Comrade Lev Leps and my peers in the program treat me like a member of the team."

Lev could scarcely bear it; he knew how Irina felt deep down. Although *Howling at the Moon* had shaken the government and the world at large, the public response to the book's description of the Nosferatu Project went beyond the authors' expectations. Rumors even spread that Irina had been made a sex slave. Those couldn't be ignored, so Irina set the record straight, but there was a hint of sorrow in her monotonous delivery.

"A number of people think I was treated inhumanely in the closed city. There's no truth whatsoever to those rumors." She shook her head. "Many are trying to read into the events of the parade in April 1961, but there's nothing to find. When I stated that I wanted to go to the moon with Lev, that was my wish. Had I been subject to abuse, I'd have bitten my own tongue off instead...or worse."

Whatever Irina said, those who disbelieved her would continue to do so—and not just about this particular incident either. Lots of people disagreed with everything they'd claimed at the press conference and were eager to say as much. Not that it mattered, since the reporters didn't ask a single question that undermined what Lev and Irina said. The government had strictly controlled access to the press conference, so the gathered journalists were little more than machines transcribing the cosmonauts' comments to print verbatim.

Once Irina finished her statement, the focus shifted to Project Soyuz, a proposed collaborative manned landing to be conducted by Arnack and Zirnitra.

"The bottom line is that *Howling at the Moon* is full of lies. Still, it can't be denied that Project Soyuz is a wonderful idea!" Lev said, his expression brightening. "Of course it is—it's not a fabrication but an actual proposal. Feltzman stole and published part of the plan. Space program personnel originally intended to finalize the design documents, bring them to the UK for discussion, and announce Project Soyuz upon mutual commitment. Franz

leaked his documents before that could happen, but after much deliberation, our nation's leadership decided it was best to embrace this claim as fact." By "our nation's leadership," Lev essentially meant Lyudmila.

Publicizing Project Soyuz would pressure the UK into negotiations. If the whole world knew about the proposal, Arnack's government couldn't pretend to be in the dark. Shooting the project down now would cause many to claim they'd essentially snubbed an opportunity for international cooperation.

Lev didn't like the idea of strong-arming the UK. Nevertheless, he told himself that collaborating on a manned lunar landing during global peacetime would be for the greater good of humanity.

"When it comes to Project Soyuz, much is still uncertain. Will these outlines and blueprints get us to the moon? Is such a feat even technologically possible? On the other hand, does a wall really exist between Zirnitra and the United Kingdom?" Lev continued. "Numerous difficulties stand before us, yes, but—speaking for myself—I buy into cooperative development. I wish to work with the United Kingdom to achieve the first manned lunar landing."

Several of the gathered journalists sighed or furrowed their brows. Many still objected to the idea of working hand in hand with the enemy. Given the time and effort the government had spent representing the Space Race as a competition, the prospect of suddenly changing that stance now dissatisfied many—even some government-approved journalists. It was easy to imagine that the general public would feel similarly, and although the will of the people meant little to the government, they couldn't ignore it altogether.

Lev took a breath before continuing. "Why enter cooperative development? Well, we all know Arnack's space program is at a crisis point following their last two setbacks. We could ignore their circumstances, but we must think broadly. For the sake of scientific innovation, and the future of space exploration, it behooves us to reach a hand out to support them."

That rationale elevated the UZSR to a position of superiority as the UK's savior. It didn't make Lev feel like the bigger man, but his provocative statement was true. Even apart from the detailed information UZSR intelligence had already gathered on Arnack's space program, it was public knowledge that

the UK was in a bind it clearly couldn't escape.

Arnack's space program was at a standstill, trapped on one side by the deaths during its recent spaceflight and on the other by the courtroom battle with the company to which they'd outsourced spacecraft development. News outlets were actively investigating industries tied to ANSA. On top of all that, criticisms of the space program as a waste of national funds were mounting, so the UK was losing its citizens' support and understanding. Reaching the moon before the sixties ended was quickly becoming impossible.

Lev wanted Zirnitra to have a relationship of mutual aid with Arnack, though he couldn't say that without drawing the ire of the UZSR's military. He needed to be careful not to step on potential land mines. The path to the moon was long, and it wouldn't be easy. The fewer enemies and hurdles along it, the better.

The rest of the press conference comprised a general overview of Project Soyuz. Under orders from Lyudmila, the cosmonauts steered away from one topic in particular: the first person on the moon. She'd already decided Lev would be first, but the logistics of cementing that decision weren't yet clear. Zirnitra had judged candidates for the first cosmonaut in space by pitting them against each other, but things wouldn't be so simple working with a foreign nation. It'd be a matter of politicking. Lev himself wasn't invested in being first; he felt overall success would be sufficient. He didn't voice that, of course.

Irina likewise expressed support for cooperative development. "Personally, I also hope we can lend our strength to ANSA, with its abundance of dhampir talent. Legends have long said that vampires are 'people of the moon,' so the moon's always had a special place in all our hearts."

Lev felt she was speaking the truth. He hadn't brought it up with her, but he was certain she felt closer to dhampirs than humans. The dhampir Kaye Scarlet was especially important to Irina, though they'd only met once.

When the presser announcements concluded, Lev finished with a statement that wasn't in the script. "To everybody watching this conference: I believe cooperative development is possible. While our nations' customs and thoughts may differ, we share the same goals. We can respect one another and share our

passion. Zirnitra can bring the project a strength uniquely our own, just as Arnack can." Lev didn't believe any newspapers would print this last statement, but he couldn't bring himself to end the conference with blind praise for the UZSR.

Backstage, a nonplussed Lyudmila awaited the two cosmonauts with a glare. "Off-script as always, Mr. Leps."

"I followed 99 percent of the script," Lev replied.

She grunted sharply, then held out a tin of hard candy. "For a job well done." He brushed her off. "No thanks."

"They're probably poisoned anyway," Irina said.

Lyudmila was a strong ally when it came to cooperative development, but neither cosmonaut wanted more contact with her if they could help it, and Lev wasn't about to drop his guard. He had no idea what Lyudmila's actual intentions were, but he knew her concern for them only went as far as their usefulness to her.

"I have scientists and engineers researching whether the Chief's design briefs are realistic and what we'll require from the UK," Lyudmila said, her voice robotic in the face of the aloof cosmonauts. "Please refrain from doing anything stupid until they finish their reviews and verifications. You made a lot of enemies the moment you went on record about supporting collaborative development. Zirnitran patriots see you as traitors now, while the military likely view you as Gergiev's lapdogs." She shrugged. "Then again, you revealed your commitment to cooperation at the 21st Century Expo. Maybe nothing's changed."

Lev thought back to the moment when the world hovered on the brink of nuclear war, and he felt a familiar flash of terror in his heart. Powerless but outraged by their country's foolishness, he and Irina had ignored the orders of their Delivery Crew escort and participated in a conference at the Expo. They'd learned of their UK counterparts' hopes and dreams. It turned out that even Queen Sundancia herself yearned for the nations to cooperate. The cosmonauts had responded by surreptitiously sharing their own dreams of cooperative

development through veiled statements that substituted food for space travel. Lev and Irina, as well as UK engineers Bart and Kaye, had finally promised to shoot for the moon.

Five years had passed since then. Their countries' continued rivalry had taken lives and eaten away budgets. Space development had come to a standstill and a crisis point. This was the perfect opportunity for the nations to cooperate, but it wasn't how Lev had hoped the opportunity would arrive. He knew neither country would've met its respective tragedies if they'd joined forces much, much earlier.

Clouds of those gloomy thoughts hovered over Lev as he left the venue, heading toward Mikhail's grave with Irina. It had been four months since their friend and fellow cosmonaut passed away. The day of his funeral had been one of cold, heavy rain, but the sky above was clear and peaceful today.

Late-winter blossoms and a light blanket of snow surrounded Mikhail's grave. Lev and Irina added their own bouquets, then dropped into a moment of silent prayer. When Lev closed his eyes, he saw Mikhail's courageous figure heading into space. Something squeezed his heart.

"When the weather warms up, maybe white roses will cover this," Irina mused, her voice tinged with loneliness.

"I'm sure they will."

"The White Rose of Sangrad" was the nickname of Roza Plevitskaya, a cosmonaut who'd once competed with Lev to become the UZSR's first. More recently, the government had forced Roza into marriage with Mikhail, only for her to lose him in a failed spaceflight.

Mikhail was far from the only tragic loss. The chief designer, Korovin, had been worked to the bone. He was now comatose, and his state was precarious—it wasn't certain he'd ever see his long-held dreams realized. Then there were the countless individuals and test animals Lev had never even known about who were gone. The UK had likewise lost its own people in the Space Race. Lev always knew that adventuring such distances would entail sacrifices, but none of those sacrifices had resulted from natural dangers. They'd stemmed from greed and ambition. It had all started with Irina—a test subject the nation itself

once deemed entirely expendable. Looking at his vampire companion, Lev felt glad once again that she was alive and with him today.

At that moment, Irina turned and looked back at him. Her sorrowful scarlet eyes met his own. "Next time we come, I hope we'll have some good news."

"If we're even one step closer to the moon, that'll be enough."

There were clear limits to what Irina and Lev could do on their own. As cosmonauts, their roles focused on spaceflight, from the launch of a craft to its safe return. The work of scientists and engineers would pave the road to such a launch, so all the cosmonauts could do for now was pray Project Soyuz became a reality.

For the two rival nations, joining forces would be a tall order. They'd entered into a treaty once before, when the National Institute of Science and ANSA agreed to peaceful space-based research into biology and medicine. Unfortunately, little came of the treaty. Zirnitra's space program was so closely tied to its military that meaningful cooperation would apparently be impossible without some degree of demilitarization.

There was still hope, however. The UK had removed its forces from the Far East, so both nations had avoided getting bogged down in a proxy war, and a nuclear disarmament treaty was likely around the corner. The groundwork for cooperative development was in place, if fragile.

At one point, the United Kingdom had likewise proposed a collaborative lunar landing. The UZSR's position had been stronger at the time, and Gergiev opted not to respond. Now both countries were at a standstill, and combining their national might could reduce their respective budgets and equipment expenditures.

Cooperation was possible, and Lev believed they could make it a reality. Korovin had almost killed himself to do it, but now they had his project and design documents.

After visiting Mikhail's grave, Lev and Irina went to the hospital to see the chief designer. The sun began to set as the cosmonauts arrived. Korovin was still in the same room, and his identity remained hidden—hospital records listed the Chief as merely "Professor Smirnoff, Physics Lecturer."

When Korovin's daughter, Xenia, saw them come in, she shot them a bright smile. "I was worried about you two! Your book made quite a splash."

"We were worried too," Lev said apologetically. "I'm glad to see you're safe."

Howling at the Moon had included Korovin's design briefs without using his real name. To hide his identity and protect his family, they'd labeled the author and chief designer "K. E. Tukhachevsky." Unfortunately, that didn't stop the Delivery Crew from visiting Korovin's home.

"They turned the whole house upside down. It was awful!" cried Xenia, whose sour expression told Lev and Irina everything they needed to know. "They even broke all my records. Those had nothing to do with the book!" The experience sounded harrowing. Lev felt even sorrier.

"We'll pay you back for your records," Irina offered.

Xenia grinned. "I'll gladly accept. But enough about all that. It's not *me* you came here to see."

She ushered them to Korovin's bedside. Behind the medical tubes attached to his body, the Chief's eyes were closed, and his chest gently rose and fell. He'd gotten thinner and smaller since they last saw him; he'd lost the imposing frame they remembered. He reminded Lev of a waning moon threatening to dwindle away until it disappeared completely. The cosmonaut couldn't bear it. Beside the bed, Irina leaned down, softly taking hold of Korovin's hand without speaking a word.

Standing next to her, Lev swallowed his sadness. "I hope you'll forgive us for going ahead and taking your project public, Chief."

There was no response. Lev thought about how happy he'd feel if Korovin awoke and gave them an angry earful over their actions.

"Hey, Lev." A frown crossed Irina's brow. "If cooperative development proceeds, how will they explain the Chief's condition?"

Knowing the UZSR government, the truth wouldn't be an option if it weakened the country's position. Korovin would likely remain hidden unless his condition was somehow unveiled or leaked to the press.

"Nobody knows who the chief designer is," said Lev. "Maybe they'll just put a standin in his place."

He was a touch skeptical of his own words; Korovin might simply end up dead and erased. Some members of the government had wanted to do that to Irina to maintain the Nosferatu Project's confidentiality. As far as they were concerned, if Korovin showed no sign of regaining consciousness, he'd be little more than a liability. Still, Lev didn't want to say as much with Xenia in the room.

"Chief..." Lev muttered.

He yearned to take some path on which everything simply went as he wanted but knew that was little more than wishful thinking. Although losing comrades pained Lev's heart, he'd keep moving forward.

He took Korovin's hand in both his own. "I'll make our dream a success. Just you wait."

He was going to do it—not as some dog of the state, but as a free, untethered zilant.

Surrounded by a conifer forest, LAIKA44 was wrapped in a cloak of late winter. Northern Zirnitra remained largely frozen even in April, and there was still no sign of spring. The seasons had seemingly ground to a complete halt—snow covered the ground, and one could see ice floating in the wetlands.

The assessment of Project Soyuz's technical feasibility, which had been set in motion earlier that winter, was still in progress. Zirnitra's top scientists and engineers had read Korovin's manifesto, "My Fight for Health," and tentatively endorsed his plans for cooperative development. The state of both the UK and UZSR's space programs had changed since Korovin drafted those plans, however.

Another current problem was that Zirnitra would need to elaborate on Korovin's original plans. That wasn't to say that the plans were simple; they were so extraordinary and far-fetched that Korovin himself had called them "delusions." Determining whether they were realistic *while* taking stock of

ANSA's current technological abilities was taking longer than anyone had imagined. Zirnitra could've done everything faster if they'd simply been able to call ANSA to discuss the details. Senior officials, however, classed Korovin's notes as a state secret, impeding the researchers' progress.

If they concluded that Korovin's plans were unrealistic, it would mean Lev had jumped the gun by publishing the document in such a subversive manner. Lyudmila, for her part, couldn't believe they'd distributed *Howling at the Moon* prior to a detailed analysis of Project Soyuz. Lev argued that he'd had no other choice at the time; such analysis was impossible while Korovin was comatose. Even now, Lev believed he'd made the right decision. If he'd done nothing at all —if he'd laid down and simply accepted defeat—he would, at this moment, have no options and no place to go. He'd have lived the rest of his life regretting having done nothing.

Zirnitran space development was on hiatus until the question of cooperative development was settled. Despite having no idea when the project might be greenlit, the cosmonauts continued training of their own accord. They studied aerodynamics and celestial navigation and improved their skills using the training equipment. Each passing day, questions without easy answers echoed in their heads. What was the likelihood of cooperative development? Would it even be possible for the UZSR to restart development alone?

In the thick of this, Roza—who wasn't training—called on Lev and Irina. There was a seriousness to her request, and she said she had something important to tell them. The two cosmonauts were full of worry as they reached Roza's home in the space apartments.

The apartment felt too big for one person, and Lev and Irina saw and felt traces of the life Mikhail led before his fateful flight. They sat on a deep-navy sofa while the nervous Roza brewed tea. She made small talk about the weather, food, and everything aside from the reason she'd called them in the first place. The conversation petered out after only ten minutes, leaving the three in silence.

Just as Lev was about to ask what was really on Roza's mind, she gently put a hand to her stomach. "I'm pregnant."

Pregnant...?

The sudden announcement momentarily stunned Lev and Irina. In the next moment, the two cosmonauts couldn't hide their shock.

"What?!" cried Irina.

"And Mikhail's the—?!" asked Lev.

Roza chuckled. "Who else could it be?"

"Oh. Yeah..." He'd been so surprised, he hadn't even thought about how rude his question was.



Irina jabbed his ribs. "You idiot."

"Ouch! Sorry. I mean, congratulations, Roza!"

Some of their comrades' wives had given birth to children before, but this was the first time someone he saw as a friend had announced a pregnancy in person. He felt strangely flustered.

Irina, on the other hand, was calm and composed. She smiled wide. "Congratulations. I'm so happy for you."

Roza's strained, anxious expression softened. "I still haven't told anyone else," she admitted. "I'm surprised too. I had no idea who to talk to about this, or how." She'd only decided to open up to Lev and Irina after much deliberation.

Rubbing her stomach gently, she told them what she wanted to do next. She expected her baby in July, and she intended to use the opportunity to retire from active military duty. She would leave LAIKA44 and return to her family home in suburban Sangrad.

As Lev listened, it slowly dawned on him that the conversation was really happening. A new life was growing inside Roza, and the miracle of it filled him with joy.

Roza, however, heaved a deep, heavy sigh. "I'm worried this will stir up commotion. I want nothing more than to live a quiet life, but that might be impossible."

A marriage between cosmonauts had produced Roza's child, and those nuptials had been an act of national propaganda broadcast worldwide. Mikhail's passing had also been global news. Fortunately, the UZSR lacked tabloids like *Arnack News*, yet there was a good chance that Roza's child, like her marriage, would serve as political propaganda. Given Roza's feelings, Lev and Irina wanted the government to leave her to live quietly, but they knew the truth; so long as you were a UZSR citizen, you couldn't defy the state's orders.

Many Zirnitrans sympathized with Roza's fate, but she wanted no such sympathy. She'd lived alone before marrying Mikhail, and she'd have no trouble doing so again.

When she told them as much, Lev's eyes filled with determination. "If you're ever in any trouble, tell us right away. We'll do whatever we can to help."

Irina's eyes shared the same glimmer. "I'm here for you, Roza. It's your precious child. You can rely on me for anything."

"Thank you." Tears welled in Roza's eyes and ran down her cheeks. "I-I'm sorry. I'm just so relieved, I..."

Lev's heart overflowed with emotion. He prayed that Roza and her child could live happy, peaceful lives—but at the same time, he could scarcely bear how powerless he felt.

News of Roza's pregnancy spread to the cosmonauts and candidates. Everyone reacted the same way: first with surprise, then with delight for their comrade. Lt. Gen. Viktor, for instance, wrapped Roza in a tight hug as his eyes misted over with tears. He had long felt responsible for his inability to stop the forced wedding and the reckless spaceflight that followed.

Lev and Irina teamed up and arranged a simple, warm celebration in the space apartments' lounge. Everyone was excited about the event. Guests turned up as the sun began to set, carrying gifts and homecooked food. The cosmonauts arrived leisurely after the freshman candidates for a total of around fifty guests. Many brought their wives and children; everybody who'd moved to LAIKA44 when Lev did had a family now. As the scapegoat in the guerilla publishing adventure, Viktor wasn't permitted to attend, but he did stop by to deliver a huge amount of alcohol. Roza, the guest of honor, wandered through the party with the kind of bashful smile she usually hid. The sight made Lev and Irina glad they'd organized the event.

Facing those gathered in the assembly lounge, Lev held up a glass of zhizni to toast Roza. "To Roza Yashina's happiness in the future!" he cried. "Cheers!" He quickly gulped down his zhizni, which warmed him right up.

Everyone was bright and boisterous, thrilled that there was something to celebrate—there'd been little to smile about for so long. The fact that the party was for Roza made their joy all the sweeter. The state had put her through the wringer, and everyone raised their glasses to wish her happiness from the

bottom of their hearts.

Neither Roza nor Irina drank any zhizni themselves, substituting the same things the children drank—berry juice and soda water. Irina even refrained from the usual "just one sip" excuse that generally ended with her blind drunk, maintaining unusual self-control. Perhaps she wanted to support her friend or avoid embarrassing herself. At any rate, Lev kept an eye on Irina, knowing the scent of alcohol alone made her tipsy.

The children at the party surrounded Roza, placing their hands on her stomach. The thought that Roza would soon be a mother was still strange to Lev, but it hit him hard nonetheless. The White Rose of Sangrad once aimed to be humanity's first cosmonaut, and her fiery competitiveness had turned the men around her into rivals. It would've been impossible back then to imagine stoic, haughty Roza with the kind, gentle smile she now wore.

It wasn't just Roza who'd changed; so had Irina. The human-hating young woman who'd looked for arguments wherever possible was all but gone.

What about me? Lev wondered. He might not be aware of the ways he'd changed over the years. Perhaps Irina, who'd been with him the whole time, had observed the differences.

"Hey, Lev!" called Semyon, his face already flushed. "Why're you staring so intently at the princess, huh?"

"Reflecting on the past, that's all."

"Well, well! You don't deny Irina's a princess, then? Ha!"

"You know, she really is the ruler of an old castle."

"How old are you, Lev?" Semyon asked suddenly.

"Twenty-eight."

"I see, I see." Semyon grinned mischievously. "Same age I was when I got married. Interesting."

Lev wanted nothing more than to flee the annoying conversation that would follow. Nevertheless, he decided it was best to humor Semyon, since the man would just chase him down anyway. "Why ask my age when you already know

"Why indeed? Well, how old's the princess?"

"Twenty-four."

"So, you two are twenty-eight and twenty-four. Gotcha." Semyon wrapped his arm around Lev's shoulder and then pulled him in to whisper in his ear. "You thinkin' about it, then?"

"Thinking about what?" asked Lev, playing dumb.

"Let me tell you something, Lev. If you always peer up at the stars, you'll lose what's waiting right by your side." He slapped Lev's back and gave him a thumbs-up, then waltzed back into the crowd.

Lev knew what Semyon was trying to say. He and Irina were of marrying age. Wouldn't marriage be another problem entirely, though? He sipped his zhizni and let his thoughts wander. Whenever people asked him about marrying Irina, he played dumb and made excuses, but he didn't like being so vague and milquetoast. After all, Irina was the only person he could think of spending the rest of his life with.

Since becoming a cosmonaut, Lev had gotten chances to travel, both within the UZSR and around the world outside it. Women had approached him numerous times, but he'd turned them all down, saying he was busy with duties. His sole focus was reaching the moon, and every day was hectic with training. Lev barely had time to relax, let alone consider starting a family.

It'd been that way for seven years, and Irina had been there for them all. The whole world was familiar with her declaration at the parade—"I want to go to the moon with Lev!"—and many assumed the two were lovers or engaged already. Semyon and the other cosmonauts hassled him about it. Lev didn't take it to heart, but he couldn't ignore Irina's own perspective on the matter—not after her protests at Mikhail and Roza's wedding.

"I'll never marry a human!" she'd cried. "It would spoil my bloodline...disgrace my species!"

Rather than expressing Irina's real feelings, those words were probably just an angry response to teasing. All the same, the truth was that a wall existed

between the pair.

Zirnitran humans considered vampires a "cursed species" and isolated them from human communities. Lev had never even *heard* of an instance of humans and vampires mingling or coexisting. That pointed toward how rare pureblood vampires were in the first place. Their rarity was one reason the Nosferatu Project, which further objectified vampires by making them test subjects, had been pushed through.

Vampires weren't treated like humans. Irina's case was unique in that she'd received a family register and citizenship documents, but only to promote the UZSR around the globe. Lev had to wonder whether it'd even be possible to register her marriage. Of course, that line of thinking was another excuse. If there wasn't a precedent, he and Irina could always set one themselves, regardless of how the world thought of vampires.

Since meeting Irina, Lev had never seen any man make a move on her. Her aura certainly made her difficult to approach, and her vampire blood was a major pitfall at the end of that long ravine. Lev himself was already clueless when it came to human women, and he was even worse when it came to vampires.

He downed the rest of his zhizni and poured himself another glass. Before he even realized it, Irina stood behind him. "What's wrong, Lev?"

"Ack!" He almost spilled his entire drink.

Irina rolled her eyes, putting her hands on her hips. "Look at you, Mr. Serious. We're celebrating here! Save the brainstorming about cooperative development for some other time." She'd assumed he was mulling over something else entirely.

"That's not what I was thinking about," Lev mumbled.

"Oh? What's on your mind?"

You, actually, he thought, but this was Roza's party. Moreover, the assembly lounge was packed. This wasn't the place for that conversation, so Lev was lost for words.

"There's that serious look again." Seeming tired of the expression, Irina poked

his ribs, tickling him.

"Wait!" Lev laughed. "Stop!"

"Never!"

Lev continued chortling. "Stop! Sto—aah!" The zhizni in his cup splashed over Irina's face.

"Eek!"

"S-sorry!" cried Lev, hastening to wipe her face, but it was already too late.

"You won't get away with that, Lev," Irina murmured, cheeks flushing red. Her tickling intensified.

"Stop!"

"Nnnever!" she slurred.



Lev tried to run, but she held him with impressive strength. "Wait!" he pleaded, cackling. "Someone help!"

Watching Lev writhe, Semyon turned to the kids standing nearby. "Go get him."

They ganged up on Lev, joining Irina's tickle attack. It was a massacre. When Lev saw the amusement in Roza's smile, he gave himself over to the moment, doing his utmost to endure the tickling.

When the celebration wound down at last, Lev took the elevator with Roza back to their apartments. On his back was the drunk, sleeping Irina.

"Things were only prim and proper for five minutes," Lev said with a sigh. "From then on, it was just drunken revelry."

Irina's behavior had been a prime example, but Semyon drank so much he vomited. Other guests had made rowdy splashes of their own. Lev had hoped they'd give Roza a formal send-off at the end of the party, but it quickly became clear that wouldn't happen.

His apologetic expression contrasted with Roza's smile. "At least they had a great time, right? It's been so long since we had cause to celebrate. I think this was a chance for everyone to let out what they've been bottling up all this time. Anyway, I haven't even given birth yet."

"Once you do, we'll hold a proper event," Lev promised as they stepped off the elevator.

Using Irina's key to unlock her apartment door, he and Roza headed inside. Lev set the vampire on her bed as she murmured to herself.

Irina's bland room was almost completely unadorned, but her apartment was no different from a human's aside from the wooden planks over the windows to block sunlight. The stuffed black dragon toy hanging on the wall was usually present in Zirnitran spacecraft; it floated when they hit zero gravity. Lev wondered whether Irina looked at it and thought about spaceflight. He said good night to the sleep-talking vampire and headed for the door.

Roza patted his shoulder. "I've been hanging out with Irina a lot recently."

"I know. You two have been going to eat and see movies."

When Roza lost Mikhail and despaired, Irina never left her side, which forged a deep friendship between the women. But why had Roza brought this up out of the blue?

"Wherever we are, and whatever we're doing, she always talks about you." Roza's expression was stern. "I don't think she's even aware of it."

Lev glanced at the slumbering vampire. "Hmm. I, uh...I see."

Roza's gaze hardened. "When it comes to anything besides space, you're utterly useless, Lev."

"Mmph." The barb hurt, and he couldn't reply.

That apparently awakened Roza's past self, the stern White Rose of Sangrad. "It seems to me that, after I leave, nobody else will give this to you straight," she admonished him. "So I may as well tell you now: make a choice."

"A choice...?"

"About what you and Irina will do after all this. Haven't you even thought about it?"

"Well, it isn't like we're..." Lev held back from saying *lovers*. In the end, that was little more than a word. Lev and Irina's bond felt much deeper. The moment he shared his blood with her, she'd become so much more than just another person to him. And yet...

Roza crossed her arms. "Unlike Mikhail and me, you have the freedom to choose your own way. It's astounding. How can you have the courage to release a tell-all book attacking our government but lack the guts to share your own feelings?"

Her thorny jabs pricked him, leaving him flustered. "I know, I know. It's just, right now, we're moving toward cooperative development with Arnack... It feels like the timing's all wrong."

"Timing? Are you sure you're not just too busy staring at the moon and stars to see what's in front of you?" Her words echoed Semyon's.

Lev laughed nervously. He wanted to tell both Roza and Semyon that they were nosing too far into his private life, yet when he thought of their earnest concern about his future, he hated the fact that he couldn't take the one necessary step forward.

Roza uncrossed her arms and sighed. "You're worried and unsure. I get it. You and Irina are two different races, and you're household names. Your situation's anything but ordinary. When it comes to love, I know I'm not exactly an old hand myself. But at least let Irina know how you feel. And do it before the government uses you both." Her eyes pierced him to the core, punctuating her point.

He nodded. "I'll think about it. Really."

"Your lives are for you two to live, so I won't say any more than I have. But let me end with this—your dream is to go to the moon, right?"

"Yes, although I don't see that as just my dream anymore."

Roza took a breath. When she spoke, it was slow and clear. "Irina's dream is to go to the moon with you."

The words went straight to Lev's heart. He wanted the same thing, of course—the moon landing wouldn't be the same with anyone else. When he and Irina met Gergiev in person, the Supreme Leader *had* confirmed that two crew members on the lunar landing would have to be Zirnitran. Yet Lev hadn't warned Gergiev that he wouldn't go without Irina, and Irina had acted indifferent. His heart wavered.

"Good night, Lev," said Roza, exiting the room and leaving him with his thoughts.

He glanced once more at Irina's face, innocent in slumber, then left her apartment with an itch in his chest. Instead of going back to his room, he climbed the stairs to the roof to think. The evening breeze whistled through the silver birch trees as he leaned against the ice-cold railing.

Establishing cooperative development with the UK was imperative to reach the moon. When the initiative finally succeeded, two cosmonauts would stand on the lunar surface: Lev and someone from Arnack. Lev and Irina simply couldn't land on the moon together.

Was Irina all right with that? She'd said as much. "Lev's first, then. I don't care about order." Of course Irina understands the circumstances, Lev thought. That's why she told Gergiev that. We'll work with the UK and make our dream come true with our comrades.

They'd come so far. It was no longer time to chase individual dreams; what they were aiming for was far bigger. Irina had absorbed the reality of the situation and was behaving accordingly, as always—staying cool and determining her options. If necessary, she was prepared to give up everything to see her hopes for the lunar landing come to fruition. She'd practically sacrificed herself before, lying that she'd joined Korovin's design bureau to urge Lev into space.

Lev tried to think of another way to stand on the lunar surface with Irina, but without Arnack's cooperation, they'd never reach the moon in the first place. Everyone wanted cooperative development; it was the promise they'd made Bart and Kaye. Achieving a crewed moon landing alongside their UK comrades would certainly thrill Irina too.

His head spun, and he heaved a heavy sigh. A white cloud of breath floated into the darkness, where a crescent moon hung lonely in the sky.

The UZSR's assessment of Project Soyuz at last concluded in May. The snow had finally melted, and the sweet scent of lilacs filled the air.

Zirnitra's greatest minds had gathered to revise the genius chief designer's "delusions" through trial and error, producing a report on a lunar landing that current technology could achieve. The document would be considered a proposal to the United Kingdom.

Lev was representing the nation's cosmonauts at a confidential meeting. Lyudmila, Gergiev, and the supreme leader's most important supporters were also there. Lt. Gen. Viktor attended on behalf of the development sector, alongside bureau chiefs, scientists, and engineers connected directly to cooperative development.

While many people with power and influence in their field were invited, those opposed to cooperative development—Boris Graudyn, the Minister of Defense, and some military officials—were left out to keep excessive criticism and argument from bogging down the meeting.

To prevent those who objected from forcing their way in, the meeting was held in Kosmos, a Space Research City on Sangrad's outskirts, instead of the usual Sangrad location. The attendees gathered in a room in the restricted sector, and each supervising official read the details of their report aloud.

Project Soyuz and Cooperative Development Between the Zirnitra Union and the United Kingdom of Arnack

Introduction

A cooperative, crewed lunar landing's success rests on how the two participating nations handle three elements:

- Required equipment for a manned landing (rocket, lunar module, CSM)
- Data gathering from unmanned lunar probes
- The indispensable digital computer

Current State of Zirnitran Space Development

Personnel are developing two crewed missions simultaneously: the Rodina L-I lunar orbital flight project and the Rodina L-III lunar landing project. A Rodina craft's layout and structure can be altered based on project requirements; therefore, the L-I and L-III models are effectively two different ships, including in terms of weight.

Current State of Binational Equipment Development (Completion Status: [y], [n], [-])

ZIRNITRA UNION

- Rodina (manned spacecraft): [y]
 Although Rodina I (piloted by Mikhail Yashin) malfunctioned upon returning to Earth, its flight was otherwise successful. Personnel have identified and redesigned the sources of the malfunctions; Rodina is therefore complete.
- Large-scale rockets (two designs): [y]
- L-I Mumit: [y]Launched Rodina I.
- L-III C-I: [n]
 While Professor Boris Graudyn still claims this ultra-large-scale rocket will be completed, we currently consider it unsuitable for practical use.
- Lunar module: [n]
 Scheduled for use with Rodina L-III. Delayed due to budget. Earliest possible completion date projected in the 1970s.

UNITED KINGDOM OF ARNACK

- Hyperion (manned spacecraft): [n] The cause(s) of Hyperion's two accidents are still unknown, and accident reports exceed 3,000 pages. Over 20,000 defects exist at the manufacturing level. ANSA is in litigation with the manufacturers and has suspended Hyperion development.
- Chronos (large-scale rocket): [y]
 Designed specifically for, and more than capable of, lunar spaceflight.
 Ready for practical use.
- Lunar module: [-]
 Redesign difficulties, particularly in terms of reducing craft weight.
 Underfunded.

Progress Toward Scientific Exploration of the Moon

Safely reaching a destination—including the moon—requires a map, and data on the lunar surface is needed to facilitate the lunar landing. Broadly speaking, data gathering requires four elements:

- Surveillance of lunar surface: [y]
 Both nations have completed this mission and determined that a lunar landing is viable.
- 2. Mapping of full lunar surface, selection of landing zone: [-] A map must be created and landing zones determined, based on unmanned probes' photographs. However, the brightness of such images varies depending on the time the image was captured, which obscures the lunar topography. The mapping stage is therefore incomplete.
- 3. Soft landing of unmanned probe: [y]
 Zirnitra's Diana 7 probe achieved this. Arnack is proceeding with its own attempt; based on their technological capabilities, success is likely.
- 4. Measurement of lunar gravity: [-]
 Gravity will impact spacecraft. Therefore, we must account for the moon's gravitational pull in lunar orbit to ensure a safe landing. Neither nation has

measured this successfully. Diana 8's measurements indicate uneven lunar gravity. We hypothesize that density variances in the moon's crust/surface produce this unusual phenomenon. We currently lack further information on lunar gravity; fortunately, the Diana series is proceeding satisfactorily. We expect the required data following a launch in the near future.

Bearing the above details in mind, and based on both nations' strengths, we propose the following:

- Arnack: lunar module/digital computer
- Zirnitra: manned spacecraft/CSM (lunar module excepted)
- Both countries: rockets/launchpads as required

A collaborative lunar landing cannot proceed if either country is unable to provide the above equipment. In terms of the crewed flight, the nation that provides a craft capable of transporting cosmonauts will have a corresponding advantage when selecting the crew for said craft. (The spacecraft currently proposed for use is the Rodina L-I, potentially rendering the C-I rocket unnecessary.)

We envision accomplishing Project Soyuz's final goal (a manned lunar landing) via the following steps:

- 1. UZSR launches CSM carrying three cosmonauts into lunar orbit.
- 2. UK launches unmanned lunar module into lunar orbit.
- 3. CSM/lunar module rendezvous/dock in lunar orbit.
- 4. Two cosmonauts transfer to lunar module, descend to moon.
- 5. CSM remains in orbit, awaits lunar module's return.
- 6. CSM/lunar module again dock in lunar orbit, depart for Earth.

The above procedure will allow the UK to abandon the Hyperion spacecraft

design, which is now the subject of court proceedings. They can also sidestep weight reductions to the lunar module through an independent launch of that craft.

Step 3 presents a new challenge: entering shared lunar orbit. We believe this will be possible using existing Arnackian spacecraft. However, it should be noted that Step 3 is the most difficult stage of the mission. It essentially requires spacecraft to be launched into shared orbit from two separate nations, then for the crafts to rendezvous and dock there.

Rendezvous/docking technology will be vital to the lunar landing. At present, the UZSR has neither rendezvoused nor docked successfully. The most the nation has achieved is the *appearance* of a rendezvous via parallel spaceflight. Our only option in this regard is to improve our technological expertise.

Furthermore, while Arnackian crafts have rendezvoused and docked in Earth orbit, abnormalities in the lunar gravitation field may prevent success in lunar orbit.

Q: What happens if we cannot gather accurate data on these abnormalities?

A: We may miscalculate the required flight altitude in lunar orbit by as much as ten kilometers, leading to failure. It is imperative that we acquire this gravitational data as early as possible.

Test Missions

It goes without saying that we cannot jump directly into the final lunar landing mission. We must first launch a series of test missions and scientific surveys of the moon. These test missions specifically require human adaptability. They must therefore be manned; simulations and/or probes are not feasible.

Details on each necessary test mission's goals follow below:

MISSION 1: Manned CSM enters/exits lunar orbit and returns to Earth

The crewed craft will orbit the moon, then return. Since this is Rodina L-I's current mission, the groundwork is already in place. The original timeline for this mission placed unmanned lunar orbit in December of this year, followed by manned lunar orbit in April next year. Now that unnecessary projects have been scrapped, however, we can focus manpower and resources purely on this mission, rendering a manned attempt in December viable.

Mission 1 will be handled solely by the UZSR. If we do not succeed, we will be unable to proceed with cooperative development for reasons to be explained at the meeting in person.

MISSION 2: Manned CSM rendezvouses/docks with unmanned target drone in Earth orbit

Project Soyuz will involve spacecraft from both nations; therefore, crafts must be compatible. We will use a target drone to determine compatibility.

Arnackian participation will begin with this mission.

Prioritizing budget/schedule over this test flight would create the risk of lunar orbit issues—for example, mismatched adapter sizes rendering the docking process hopeless. Air pressure and composition aboard the two nations' ships might also differ. If the ships lack adapter modules to regulate those differences, we could run the risk of explosions.

We will conduct this test in Earth orbit; therefore, we can perform it using

small-scale rockets and on a relatively small budget. The mission will also allow us to build support for international cooperation; it will be the first time in history that crafts from both nations meet in space.

MISSION 3: Manned CSM rendezvouses/docks with unmanned target drone (mock lunar module) in lunar orbit and surveys lunar surface

The most important and difficult technological test. The rendezvous/docking procedure is identical to Mission 2's but conducted in lunar orbit. This mission will provide an opportunity for simultaneous lunar surveyance; we will request that the UK provide drones with such capabilities.

Adapting a target drone/lunar module from the manned surveillance satellite the UK has been secretly developing for its military space station will allow us to shorten the craft's development period. The possibility exists that the UK will deny use of that craft for this mission, since the technology is confidential. However, the UZSR will divulge classified information as well, balancing conditions on both sides.

The lunar survey's purpose will be high-definition photography of the lunar surface, accomplished using a high-definition camera developed for surveillance satellites.

The actual steps will be as follows:

- 1. This mission assumes that we have a finished map of the lunar gravitational field. With that in mind, we can proceed to the next steps.
- 2. The UK launches target drone/lunar probe into lunar orbit, which then captures high-definition photographs of lunar surface.
- 3. UZSR launches Rodina CSM. Three-person crew from both nations rendezvouses/docks with target drone based on information from map referenced above.
- 4. Two cosmonauts transfer from CSM to target drone to acquire film containing high-definition photographic negatives of lunar surface.
- 5. CSM returns to Earth. Since both countries' cosmonauts will have cooperated to acquire photographs essential to the manned lunar landing,

we can use this mission to further promote the significance of international cooperation.

The above steps can confirm safe use of space suits and life-support systems via spacewalking operations.

MISSION 4: Manned CSM rendezvouses/docks with unmanned lunar module for surface landing rehearsal

This constitutes a rehearsal for the final mission. The docking procedure is identical to Mission 3's. After docking, cosmonauts will check all lunar landing equipment and run through the steps preceding the landing. The lunar module will detach from the CSM, descend to the moon, and make contact with the lunar surface. Instead of landing fully, the module will then return to lunar orbit and rendezvous/dock with the CSM.

With all four test missions accomplished, we will be ready to attempt the final crewed lunar landing.

Supplementary Material Regarding Digital Computer

This section addresses the necessity of installing an Arnackian digital computer in Project Soyuz's spacecraft.

During production, Rodina I's systems designer submitted request forms for a digital computer to various relevant state institutions. However, they did not grant permission, so computer installation was abandoned. (The UZSR is entirely unable to ready anything deemed optional in a timely fashion!)

On the other hand, when the Arnackian government required a computer, fierce competition between private enterprises in the UK allowed them to enlist a company with an appropriate technological background.

The Mission 1 spacecraft, Rodina L-I, is set to be equipped with the UZSR's first digital computer, Black Dragon. However, the computer is far from complete and lacks precision. Intelligence indicates that Arnack's computer technology is several generations beyond ours. We've dedicated our time to fully automating analog computers, and we are now paying for neglecting digital computing.

According to our current timeline, we will rendezvous/dock with an Arnackian lunar module from Mission 3 onward. In light of that, installing an Arnackian computer is in our best interests.

This is a matter of Zirnitra lacking technological capability, rather than of safeguarding technological compatibility. Our Black Dragon is capable of processing a simple trip around the moon but unable to handle operations beyond that. In contrast, the Hyperion Guidance Computer (HGC) in development in the UK is capable of reaching the moon via autopilot navigation. It is more accurate and adaptable in orbital flight, which will aid rendezvous and docking procedures and thus our lunar landing attempt.

This concludes the report.

Lev's palms were sweaty as he reached the end. He saw the path to the moon

before them; the steps had suddenly grown concrete.

The National Institute of Science's Space Science Research Center had put together most of the report, and Director Volkov spoke on their behalf to the attendees.

"In any case," he began in a gravelly voice, "our foremost priority will be Mission 1, a successful manned lunar orbital flight. However unfortunate, the death of Comrade Mikhail Yashin heavily impacted perspectives on the Rodina spacecraft. If we do not redeem ourselves by completing Mission 1, cooperative development will prove incredibly difficult, if not impossible."

The mission might've sounded like a trifle, but it was unexplored territory. It would mark the first time in history that humanity made the 380,000-kilometer trip to the moon and back. Furthermore, successful lunar orbit would be much more difficult than Earth orbit. They'd have to consider time and distance, of course, but also the moon and Earth's constant motion. The trip would require minute calculations and precise flight technology.

"Should we fail in our attempt," Volkov continued, "Zirnitra will appear to lack a craft capable of reaching the moon, crushing any hope of completing the subsequent missions."

Lyudmila interjected before the director could utter another word. "Yes, yes. I'm well aware of how difficult this mission will be. But isn't it your *job* to make it a success?"

"You're entirely correct." Volkov nodded.

Gergiev gripped his copy of the report tightly, his face a picture of uncertainty. "F-firstly, will the United Kingdom even agree to these plans?"

A chilling smile grew on Lyudmila's lips. "They will. But that hinges on us achieving successful lunar travel first, since at that point their refusing would be tantamount to admitting defeat in the Space Race."

He didn't look convinced. "How so?"

"The United Kingdom's currently incapable of readying a manned craft, isn't it? This could mean we reach the moon while leaving *them* on Earth."

Gergiev grunted, surprised. "Why don't we just throw this plan for collaborative development out the window, achieve Mission 1, and declare victory ourselves?!" he demanded, shaking his fist in the air excitedly. "We'll turn things around!"

Lyudmila fixed him with a withering glare. "How incredibly and utterly foolish." Gergiev reeled as she went on. "Simpleminded, rash, shortsighted, thoughtless."

The supreme leader had no retort. She left him simply blinking in shock, mouth drawn into a flat line. Lyudmila was overwhelming, even to Gergiev.

"A trip around the moon and back is nothing more than surveillance of enemy territory," Lyudmila continued. "Almost every nation will eventually be capable of that. We're aiming to accomplish much more. Once we descend, land, place our flag, and conquer, the people of the world will feel we've always been above them, whether they're aware of it or not. So long as they live upon Earth, they'll never escape that feeling. Understand?"

"Erm, yes," Gergiev muttered.

Lyudmila turned to the attendees. "In terms of cooperative development, doesn't one question matter more than any other? Specifically, who will be the first human to set foot on the lunar surface? In truth, we'll answer that question by accomplishing Mission 1."

Chatter filled the meeting room.

Lyudmila knocked her desk with her fist. "As the report states, demonstrating that the UZSR has a spacecraft capable of transporting a crew to the moon will give us a significant advantage. And Zirnitran Diana probes will map the lunar gravitational field. So, when we propose the Soyuz Treaty to the UK, it'll contain the following condition: 'If you wish to use our gravitational map and spacecraft, a Zirnitran must be captain, and the first human to step upon the lunar surface must be Lev Leps.'"

Huh?! Lev couldn't believe his ears. The shock compelled him to speak up. "I was under the impression that the proposal wouldn't cover cosmonaut selection."

"After three months of deliberation, we judged this the best way to handle that process," Lyudmila replied calmly. "You're a little soft, Lev. Advocating for yourself in a debate on the crew is likely beyond you. There's every chance you'd just end up making an Arnackian captain to avoid an argument." She saw right through him.

What also surprised Lev was the extent to which Lyudmila had taken charge of the meeting. She must've been deeply involved in drafting the project plans. The woman wasn't just intent on a puppet government—she wanted the whole space program to herself.

In light of that, Lev decided he wouldn't hold back. He'd use the higher-ups as they used him. "Please ensure that the proposal requires that the lunar flight crew include Irina Luminesk."

The right side of Lyudmila's mouth quirked up in a grin. "That was our intention all along. Irina made such a fuss about going to the moon with you. Allowing her that will garner us support from Nosferatu worldwide. Let me say this much, however: It'll be impossible for you two to stand on the lunar surface together."

It seemed there was simply no getting around that fact.

"If we deny the UK their own moment in the spotlight," Lyudmila added, "our negotiations won't even have a chance to get off the ground."

Gergiev broke his silence with an abrupt clap of his hands, relief flushing his features. "Wonderful!" he cried. "Let's put this into action immediately!"

"Just a moment, please!" Volkov cut in, panicked. "We'll draft a proposal based on this report, of course. That said, we must consider nontechnological concerns in advance." The first was confidentiality. "Many Arnackian scientists and engineers will visit Zirnitra in the course of the missions the report outlines. We'll have to allow them access to restricted areas and closed cities."

The military was resolutely against that idea already. Their stance was that a good deal of space technology was closely tied to the armed forces. Furthermore, Graudyn—who'd flown into a rage when his pet project was rejected—was colluding with the military to force the C-I rocket to completion.

Lyudmila ran a hand through her hair as though tired of the subject. "We can leave Graudyn to his own devices. He'll destroy himself. Forcing him to stop would mean arguments and debates—it's far too much bother. By the time we're ready for lunar orbital flight, his failure will be crystal clear."

"Understood," replied Volkov. "And, er...as for the military?"

"I'll bring them around. They're worried about secrets and leaks, but the technology for manned spaceflight has little to do with them. If they can just let go of 'not working with the enemy,' they'll see all the benefits cooperation will allow us—for instance, the opportunity to steal Arnack's rendezvous and docking methods and computer technology. Mission 3 will also enable us to openly board the manned surveillance satellite the UK's been developing in secret."

Military control of the program budget made Zirnitran space development difficult. One reason they'd focused on developing full autopilot functionality was that the top brass wanted completely automated, unmanned surveillance satellites. Lev couldn't help wondering whether Korovin had aimed all along for Project Soyuz to reduce military influence on space development. After all, it was the army's fault he'd been worked to the bone.

The military wasn't the only problem they had to deal with. The meeting moved to the next issue: hiding Korovin's condition. The chief designer's identity was a national secret, so the UK had no idea who he was or of his current state. If he didn't appear after the two nations finally agreed to cooperate, it would arouse suspicion. And if it emerged that Korovin was comatose, that would raise doubts as to whether Project Soyuz's goals were even possible. That said, the Union couldn't simply have another scientist stand in for Korovin, whose genius came around once in a generation.

The attendees threw suggestions on how to hide Korovin's identity back and forth, eventually reaching a consensus. They'd assert that the infamous "chief designer's" knowledge wasn't that of a single design bureau chief but of numerous scientists and engineers *combined*. If Arnack was skeptical, the Zirnitrans would simply tell them the chief designer's "magic" was a spell they'd cast on themselves.

In the quiet of his heart, Lev was enraged by the discussion. At the same time, he told himself there was simply no other way to pull off cooperative development.

By the end of the meeting, Gergiev was little more than a decoration; it was Lyudmila who gave the closing statement, her eyes full of ambition. "Once we draft our proposal, I'll have my contacts deliver it secretly to the UK government. We'll await their response. But we won't waste time merely waiting—we'll push on with preparations for the manned lunar orbital flight. We'll also lay groundwork for the subsequent missions."

The nation was finally moving toward a manned lunar landing. That thought lit a silent fire in the pit of Lev's heart.

A week after that confidential meeting, Lt. Gen. Viktor called all fifty members of the cosmonaut team to the Training Center's lecture hall. As the Center's vice-director, Lev already knew what the meeting would be about.

"I've gathered you to discuss cooperative development with the UK," Lt. Gen. Viktor declared.

The cosmonauts listened in shock and awe as Viktor excitedly explained the details of each Project Soyuz mission. Excitement filled the hall; Irina's face was alight with joy. Although Roza had left the team and moved to Sangrad, Lev didn't doubt that she too would've smiled at Viktor's announcement. After the tragic, self-inflicted incidents in the space program's past, the door to the moon had seemed all but closed—yet the cosmonauts' combined might had pried it back open.

With the main announcement out of the way, Viktor explained which cosmonauts he and Lev had selected for each launch based on the individuals' performance, results, and fame. "I'll begin with those flying aboard the final manned lunar landing mission—our comrades Colonel Lev Leps and Lieutenant Colonel Irina Luminesk!"

"Huh?!" Irina's jaw dropped. "Really?" Lev hadn't told her anything about this meeting; apparently, part of her had believed she wouldn't be selected.

As dubious as Irina herself was, no one in attendance opposed the decision. The cosmonauts applauded the announcement.

"We're in this together, Irina." Lev patted her shoulder.



At his touch, she leaped from her seat, eyes filling with tears. "L-Lev..."

Semyon quickly spoiled the moment. "You did it!" he told Irina mischievously. "You convinced Lev to escort you to the moon!"

Irina spun toward him with a glare. "When I come back, I'll fill that dumb mouth of yours with moon rocks!"

The excited cosmonauts burst out laughing.

Lev calmed them before going on, his expression serious. "I should add that Arnack has yet to approve our selected crew members. And don't forget, we'll pave the path to the moon through a series of difficult missions. If we fail one of those, Project Soyuz is over, and people might never reach for the moon again."

The cosmonauts' expressions grew focused.

Lt. Gen. Viktor announced the names of the remaining missions' crew members. Most belonged to Mechta Shest—the "Dream Six."

Mission 1, a manned lunar orbital flight, would be crewed by the man who'd watched humanity's first spacewalk from aboard True Mechta II in 1965: Lt. Col. Stepan Levitzky, call sign Agate II.

"This is a 380,000-kilometer journey. One humanity has yet to accomplish," Lt. Gen. Viktor said somberly. "There's no guarantee of success."

"I'll do my utmost to make it home safe!" The confidence in Stepan's voice was unwavering.

Next was Mission 2, the Earth orbit rendezvous and docking test. The key cosmonaut would be Lt. Col. Zhores Rimsky, who'd completed a fake rendezvous with Roza aboard Mechta III in 1962. A genuine rendezvous would be a chance for him to clear their names.

Mission 3, the lunar orbit rendezvous and docking test, was assigned to history's first-ever spacewalker: Lt. Col. Semyon Adamov, call sign Agate I.

"Yes, sir, that's me!" Semyon squeaked, his voice rising in pitch.

That drew another laugh from the cosmonauts.

Even Lt. Gen. Viktor couldn't hide a wry chuckle. "We expect the UK to

announce the other two members of your crew eventually. Who better to work with the Arnackians than someone as cheerful as you? It'll be a weeklong trip to the moon, plus rendezvous and docking. No bickering, understand?"

"Ha ha! A few glasses of zhizni will make a friend of anybody," Semyon said.

It went without saying that Roza and Mikhail would've flown Mission 4—the lunar landing rehearsal. With neither available, however, the mission would be assigned to an exceptional freshman cosmonaut selected through tests over the following days.

The freshman class looked enthusiastic and eager.

"Don't assume this'll all be about glad-handing foreigners," Lt. Gen. Viktor warned. "Piloting ability is of utmost importance."

They expected to use the UK's digital computer from Mission 3 onward, requiring the Zirnitran cosmonauts to accustom themselves to Arnackian piloting methods and computing technology. In short, the selected cosmonauts would have only a short time to familiarize themselves with all-new equipment.

Lt. Gen. Viktor showed everyone a photo. "Here's the interior of the Rodina craft we'll use for lunar orbit. Look how beautifully simple it is." The piloting panel contained warning lights, meters, dials, and monitors, but—since it was fully automated—only four switches or buttons cosmonauts might need to use. "Meanwhile, we've heard Arnack's Hyperion craft contains as many as a thousand switches and buttons."

Lev had seen an older Arnackian spacecraft—the Hermes—in an Expo display. He'd been shocked at the sheer number of switches it contained compared to the Mechta. Still, a *thousand* was astonishing.

Irina and Semyon's faces twisted in shock. The cosmonauts began muttering among themselves.

"Enough!" Viktor barked, silencing them. "I didn't say you'd need to use all one thousand switches. Hyperion's onboard computer apparently handles spaceflight for the most part. And we expect astronauts to captain Missions 3 and 4 for the sake of evenhandedness, which'll put less strain on our team."

"Talk about a relief," muttered Semyon.

Viktor gazed sternly at Lev and Irina. "As the final mission's Zirnitran crew members, we expect mental fortitude and expertise from you two."

The plan was for Irina to pilot the CSM during the lunar landing. She'd be in charge of the lunar module's rendezvous and docking. As captain, Lev wouldn't just take the reins on the flight to the moon, descent, and module landing. He'd also be responsible for exploring the lunar surface.

"You'll need training on how to use the UK's computer," Viktor told Lev, Irina, and Semyon. "That technology doesn't exist here, obviously. And although you'll travel to the UK once we finalize cooperative development, you'll only have your imagination till then. In a worst-case scenario, the Arnackians might view us as dead weight as the launch date nears. What's more, our reputation's already poor—especially since *Howling at the Moon* revealed that Lev and Irina just needed to sit in their ships during spaceflight and then land via parachute." Lev had denied the tell-all's contents at a press conference, but other nations were still dubious.

Even so, a fiery passion burned in Lev's chest. He'd begun his career as a fighter pilot, and now all he had to do was prove himself. Meanwhile, Irina—while not a longtime air force member—had spent lots of time piloting and was now on par with the air force's best fliers. Even if they were unfamiliar with Arnack's computer and lunar module, they were prepared to put in the work to understand and master both.

"I'll do our nation proud," Lev said, meaning every word.

Irina likewise brimmed with confidence. "Just sitting in a spaceship's so boring. The more there is to do, the better." Her red eyes glittered with fiery intensity.

They looked at each other and shared a resolute nod.

Green Eyes

• очи темно-зеленые •

N HER PENTHOUSE in Sangrad, Lyudmila devoured sugared cranberries and glanced through Zirnitra's cooperative development proposal for Arnack. A symphonic piece entitled "The New World" played on her phonograph, lending depth to the evening scenery outside the window.

Lyudmila's long years of work had finally borne fruit, and it was time for the harvest.

Back in 1950, as part of UZSR intelligence, she'd taken a fake name and enrolled as an exchange student at a prestigious Arnackian university. Space development had only just begun, and neither nation had achieved anything noteworthy. Still, Lyudmila had felt space fever in her skin. She heard it in the passionate speeches renowned rocket scientist Vil Klaus delivered in his television specials, and she'd seen it in the popularity of the bestselling science fiction novel *Fly Me to the Moon*.

Lyudmila knew then that space itself would become a battlefield in the near future—and that the UK, which developed technology far too rapidly, would be the victor. She started contacting promising scientists and engineers and building a personal network of connections, even using her physical assets if necessary. She was certain the day would come when that network proved useful.

And useful it was. Before the confidential meeting on Project Soyuz a few days earlier, Lyudmila had written an associate for a clearer sense of ANSA's reaction to the exposé *Howling at the Moon*. "Among its mistruths and lies, this illegal publication contains sections of a design brief," her message read. "The total brief, drafted by Zirnitra's chief designer himself, does exist. I'm happy to share it. First, however, I'd like to know the UK stance on cooperative development."

"We request a proposal," ANSA replied.

At that point, Lyudmila had called the confidential meeting excluding the military top brass, and the UZSR's other senior officials gave cooperative development the go-ahead. Just a little longer, and she'd reach her goal—to use the magic of the moon, and the way it charmed so many, to expand the

scientific realm.

To that end, Lyudmila had implemented the Nosferatu Project, colluded with authorities and the Delivery Crew's higher-ups, and cajoled Gergiev into doing her bidding. She'd also worked with covert comrades in Arnack, inserting agents into ANSA and related institutions and putting the final nails in Hyperion's coffin.

Lyudmila wanted the two countries to achieve world domination before the UZSR met its demise. Her homeland's fall was inevitable—but through it, they could streamline the nation and discard the useless. From there, they could rebuild Zirnitra. That was the true desire of those working behind the scenes on the world stage. International cooperation was little more than a means to achieve it. The world would appear split in two, with equal control on each side, satisfying the greedy in their powerful positions.

Indeed, Lyudmila intended to venture far beyond that. She wanted to conquer death itself. Eternal life was the instinctive desire of all living things, and the battle against death was one humanity shared; it united them, surpassing nationality, race, and status. The power of science would realize the profound desires of the last Zirnitran generation. They couldn't allow a mere lunar landing to fulfill humanity's dreams.

The human race currently lacked the science to research the origin of Earth's water supply or the organic matter of the human body. Only one thing was certain: The source of both lay in the reaches of outer space. If you unraveled the stars' secrets, you could control life itself, so it was worth devoting the entirety of human expertise to space development.

The Space Race pushed and encouraged science. In time, they'd understand the life cycle completely and develop galvanism, then they could even hold dominion over life. Migrating through space, perfecting the human race, attaining immortality—it all brought to mind a renowned scientist's famous quote, "What's impossible today is possible tomorrow."

There were no gods in space, as there were none on Earth, but science could make humans into gods. Yet, since humans were stupid creatures, geniuses needed to regulate the masses behind the scenes.

People said vampires lived a thousand years, but that was mere legend. In reality, it would be the few rulers who appropriated science's wonders who lived a millennium. But what would such longevity comprise? Countless years in the company of ugly, unbearable powermongers? Lyudmila wouldn't have it.

She popped another cranberry in her mouth and let its sweetness revive her. She lived surrounded by dishonesty and could only trust sweet things—fruit, candy, honey. When sugar entered her mouth, bliss filled her mind and body. Sweets would never betray her, unlike the awful human oafs she could no longer trust.

As she reflected on this, two individuals came to Lyudmila's mind: Lev Leps and Irina Luminesk. The cosmonauts' words at the parade had stirred something in her. They were determined and openly defiant in a way both adorable and despicable, and they were ready to throw their lives away pursuing their dreams. They'd gone as far as to bite the hand that fed them with the *Howling at the Moon* debacle, which sent a chill down Lyudmila's spine.

Immortality was of no interest to those two; instead, they risked their lives. That was intriguing in and of itself. If you want it so badly, give it your best shot, Lyudmila mused. Reach for humanity's long-held dream of a lunar landing.

The full moon hung outside the window. Lyudmila took another cranberry; this time, she crushed it between her fingertips. Chuckling, she licked the syrup that ran down her hand. We need a cosmonaut revolutionary to lead the way into the new world. Right, Lev?

Blue Eyes

May was ending, but humid days of thirty-degree heat continued in the UK port city of New Marseille—better known as Laika Crescent.

On a hill near the Manned Spacecraft Center, Bart and Kaye were discussing the proposal the UZSR had sent. The prospect of Project Soyuz was highly confidential, and only a small subset of Arnack's government were privy to the details. Bart and Kaye had been looped in due to their work with shipboard computers; they'd been tasked with verifying whether the project was even viable.

"I wonder if we'll have to go to the UZSR for work if Arnack agrees to cooperative development," Bart commented, munching on a hamburger.

"Hmm." Kaye was eating a hot dog generously smothered in mustard. She pondered the thought, then nodded.

The UZSR's proposal had come out of nowhere, and the discovery that they wanted the UK's digital computer was surprising. At the same time, it was understandable. The specifics of Zirnitran space development weren't clear, but ANSA believed they were intent on advancing their autopilot technology.

The proposal revealed that the UZSR had focused on analog computing, not digital. "I suspect they use configurable logic controllers and hardwired logic execution," Kaye had speculated. "Switches aboard their ships probably flip automatically at set times, or when specific conditions arise."

Analog computers required advanced mathematical ability. They were excellent for quick calculations but insufficiently adaptable for a complicated lunar landing. That was why the UZSR set its sights on Arnack's digital computing technology.



However, the UK wasn't about to embrace cooperative development just because the UZSR had sent a proposal. Many strongly opposed the idea. A prime example was Division Chief Damon, Arnack's flight director, who detested the UZSR. There were also technological challenges to consider.

Key politicians and ANSA personnel met to discuss the topic and reach a course of action, and Bart and Kaye were honored to participate in that meeting. As lead software developer on the Hyperion Guidance Computer—or HGC—Kaye's role was to report the results of her investigation into Project Soyuz's feasibility.

Over years of continuous space development, the status of engineers had improved significantly. Although most were in their mid-twenties, their opinions now carried weight. People had once seen the so-called "white elephant" computer as a hassle but now understood that computer technology was necessary to reach the moon a distant 380,000 kilometers away.

The lunar landing spacecraft would be too incredibly complex to pilot completely by hand. Even the unflappable confidence of Arnack's ace pilots-turned-astronauts had turned to a white flag of surrender after their repeated failures in the simulator.

The development of small, lightweight ICs—integrated circuits—was a major reason computers were becoming crucial to space missions. Easy to install in spacecraft, ICs changed the very role of electric circuitry; they were a huge advantage that the UZSR still didn't have.

Regardless of a computer's power, without the right programming, it was no more than a box. Computers had to be coded for specific uses, which was the magic computer engineers cast.

Bart only felt confident about that because he'd met Kaye, though. His first fateful encounter with the dhampir—when she fired what was essentially a small-scale missile and ruined his lunch—had occurred on the very hill where they now sat.

Many years had passed; shops and housing now replaced the cottonfields. The Manned Spacecraft Center was the home base of the UK's lunar landing initiative, Project Hyperion. Since becoming a space development center, New

Marseille had expanded rapidly, and various companies and research centers had set up shop there. That year, it had officially been named a "Space City."

Bart and Kaye had moved away from New Marseille some four years ago. They now lived in a city 3,000 kilometers northeast. They'd been loaned to a prominent technology institute's research lab, where they worked tirelessly on the HGC's navigation, guidance, and control systems. In terms of reputation, the institute rivaled even their old workplace, Nerd Heaven—the former Keighley Research Center. It was a fascinating location helmed by a renowned professor known as "the father of inertial navigation," and there were over 600 engineers on staff. Institute employees had even created a new meaning for the word "hack." It could now refer to applying technologies outside of their accepted uses.

Many at the institute disliked Kaye's dhampir heritage, but she was at least glad to have a solid research team around her, drawing conclusions about her *abilities* rather than her race. The "father of inertial navigation" himself had almost immediately recognized Kaye's prodigious skills and named her lead flight software engineer.

Kaye's main duty was assessing the HGC's data structures and algorithms. She also used special languages and formulas to design lunar landing software. Once confined to the gloomy corner of a dark basement office, Kaye was now entrusted with the entire project's fate.

Despite her important position, her bad habits remained...and still flustered Bart. When she concentrated deeply, she lost all awareness of her surroundings. Sometimes she didn't even realize colleagues were talking to her. She tended to burn her tongue on hot coffee, and she walked into walls so often that Bart completely lost count of how many pairs of glasses he'd sacrificed to shield her.

There was no question that Kaye was a top-class engineer. As a manager, however, she had room to improve. It was because Bart knew this that he was always by her side, ready to ensure she could focus on work without worrying. He wasn't just Kaye's assistant, though. Bart had spent his first days in D Room madly rushing just to catch up, but time and study allowed him to fill a variety of roles. He wrote reports, communicated with scientists and ANSA project

managers about planned software, took whatever criticism they provided, and revised his reports. It was exactly the kind of work Kaye was poorly suited to, yet it made Bart feel as though their projects were pushing ever onward.

People tended to think of Bart and Kaye as a pair, not individuals. In fact, institute staff often took for granted that they were lovers—but they were mistaken. Kaye was very special to Bart; they'd explored the 21st Century Expo together outside their work duties, and they'd sworn to reach for the same dream as nuclear war loomed. Still, they'd never been in a romantic relationship.

The two often appeared in public together in the course of their Arnack One duties, provoking tabloids like *Arnack News* to take candid photos and ask probing, sometimes vulgar questions. The pair always gave the same simple answer: "We're professional partners." It was as if they had such a close work relationship that they'd become unable to broach the subject of love at all.

"You know, Bart..." Kaye had finally finished her hot dog. "The thought of going to the UZSR is honestly kind of scary after reading *Howling at the Moon*."

Bart nodded. "Yeah. I'm just as scared as you are."

To ordinary Arnackians, the UZSR was dark and cold. It openly lied and executed anyone considered inconvenient. Beyond that, it was a place shrouded in secrecy. Its inner workings, and even its citizens' lives, were basically unknown. On the news, Bart and Kaye had mostly just seen Zirnitra's lavish military parades.

Lev Leps had spoken at a press conference about *Howling at the Moon*, explaining that its stories of space development were a traitor's lies. Higher-ups at ANSA believed the book was all factual, however. Bart and Kaye thought the same, and both wondered whether Lev had received orders to cover up the truth. The mere thought sent a shiver down Bart's spine.

"Imagine we could vanish because of a mistake at work." said Kaye, her eyes anxious. "I really hope that's not on the table."

"Well, we don't even know for sure that we're going there yet," said Bart.

"Putting the horror stories about Zirnitra aside for now, do you think the two

nations could cooperate to reach the moon?"

"The proposal lays it all out. It really seems like we could compensate for each other's weaknesses and make the impossible possible." Kaye's voice had a skeptical edge. "It's just that it hinges on one thing: the information in the proposal being accurate in the first place."

That was the truth of the matter. The UZSR's proposal went into detail about how they could meet Project Soyuz's requirements, but since the country hadn't publicized any information on its technology, all the UK could do for now was trust the contents were correct.

Despite the worry and fear eating at them, Bart and Kaye wanted cooperative development to proceed. Each hoped the UK and UZSR would end their rivalry and aim for the moon as allies. Lev and Irina had also publicly announced their support for an alliance.

Kaye stared out at the eastern sky. "I really hope we'll keep the promise we made at the 21st Century Expo."

Onstage at the Expo, Kaye had used metaphors about cookies and sweets to discuss cooperative development. The two Zirnitran cosmonauts had shown their support by adding their own metaphors about carrots and pryaniki. Afterward, Bart and Kaye had the pair sign their book, *The Journey to Space*. Bart's copy was one of his most prized possessions.

Lev had told them he'd like to write about having met them in an updated edition, and Bart had eagerly awaited its release. Sadly, the censors apparently deleted all mention of them; neither he nor Kaye had appeared in the most recent version, leaving him dejected.

Since the rival nations' Space Race began, both sides had seen terrible losses. The Arnackian space program was on the verge of dissolution, given that Hyperion development had been suspended following the crafts' consecutive accidents. ANSA was locked in a related legal battle and lacked the funds to revise its designs. A manned spacecraft was essential to lunar travel, and now Project Hyperion's very existence was in jeopardy.

Despite all that, the computing division kept its work up with an abundance of

hired hands, trusting that the manned lunar landing project would continue. And while HGC development proceeded at the research institute, Mia Toreador led a separate group of Arnack Computing Electronics (ACE) and D Room employees developing a navigational computer for rockets.

A high-performance general-use computer, complete with the world's first operating system—or OS—had also been introduced at the control center. The technology was known as "ACE Alpha." If the HGC was a spacecraft's brain, ACE Alpha was a brain for ground control. It could process the vast quantities of data gathered during a lunar spaceflight, and the UZSR had no way of recreating it.

Alongside those computing projects, ANSA continued retooling the troubled development of its lunar module, which hadn't yet been fully suspended. Unfortunately, underfunding was an ever-present problem, and nobody knew how things would work out. In those respects, Project Soyuz felt like a helping hand.

With hope in their hearts that international cooperation would enable space development to continue, Bart and Kaye headed to the meeting.

The most eminent people in their fields had gathered in a conference room in the Manned Spacecraft Center's main building. The ANSA representatives included Director Oliver Kissing, senior officials from institutes countrywide, rocket scientist Vil Klaus, and the lunar module and Hyperion spacecraft supervisors. The government was represented by its chief scientific advisor, undersecretary of state, and prime minister.

To Bart and Kaye, it was quite a sight. They'd attended important meetings in the past, but none had been on this scale, nor had they felt as urgent or tense. Bart was parched; next to him, Kaye wrung her hands nervously. It was natural that they were anxious—this discussion would decide the future of Arnackian space development.

Director Kissing opened the meeting with a grim expression. "It must be acknowledged that the UK currently lacks a viable manned spacecraft model."

The gathered attendees nodded gravely, heaving long sighs.

"Nevertheless, the far-fetched plans for such a craft in *Howling at the Moon* have been revised into a more realistic design, which was sent to us confidentially," Kissing went on. "The UZSR has asserted that it'll complete a lunar orbital flight before the year is out. Failure would indicate that neither nation has the means to reach the moon, ending our Space Race in a draw. Should the UZSR succeed, however, they'll win the race. Refusing to cooperate may spell our defeat."

Bart disliked his colleague's insistence on competitive terms. Still, he knew the UK and UZSR had been rivals for a very long time. At some point, the race had to end one way or another.

"The proposal states that the project's goal would be binational progress," Kissing continued solemnly. "But really, the UZSR wants to ensure the first person to set foot on the moon is Zirnitran. In light of that, I'd like to use this meeting to discuss potential changes to our manned lunar landing project."

The first agenda item was the fact that the UZSR had drafted a proposal involving ANSA technologies without obtaining permission or alerting them. That wasn't a particularly major problem; everyone involved knew that ANSA's comparatively public approach essentially supplied the UZSR with intelligence. From the first design drafts to production, each ANSA ship was photographed with 16mm film and included in quarterly reports. Concealing such technology was off the table, regardless of whether it'd place ANSA in a more competitive position. Confidentiality simply wouldn't garner taxpayer support; insistence would only lead the government to slash their budget.

The only real concern the proposal brought to light was that the UZSR had intelligence on the UK's secret manned surveillance satellite. That was likely due to the fact that both nations had spies in rival territory, though, which was a different problem altogether.

The next topic was Project Soyuz's viability.

It was Professor Klaus's turn to speak, on behalf of the team that had assessed the proposal. "It must be noted that we haven't actually seen the UZSR's spacecraft. Our data is limited. The opinion I'm giving is based solely on theories—to be blunt, we won't know anything for certain until we actually try

it. Now, the UZSR suggests we launch a CSM and lunar module separately, then have them rendezvous and dock in lunar orbit. That would be incredibly difficult, but it could be realistic with collaboration. Working together would allow us to reduce budgets and project timelines, even given each proposed mission's scope. In general, so long as we can settle any political disagreements, Project Soyuz would be almost totally beneficial."

The lead developer on the lunar module agreed. "If we follow the suggested plans, we won't need to drive ourselves crazy trying to reduce the lunar module's weight, and we'll make it much safer to boot."

Bart had visited the lunar module factory repeatedly during the course of HGC development. He'd seen for himself how difficult things were. Development utilized a team of over 3,000 people, and the module included approximately a million individual handmade components. Even a single switch had to be durable and avoid causing a single spark during launch. Given the number and complexity of the components, even if the team was 99.9 percent certain the module was safe, that still left a *thousand* potentially faulty parts. They had to focus on accuracy and precision or they'd invite accidents. Although they'd created over twenty test modules, they had yet to approve one.

Currently, the main problem was weight reduction. The module exceeded weight requirements even when the team left its wiring bare, and ANSA was offering a monetary reward to anyone who successfully lightened it. If Project Soyuz solved that problem, they'd finish the lunar module much faster.

"So, you believe we should accept the proposal?" the prime minister asked.

Professor Klaus nodded confidently. "Cooperative development would be in our best interests."

That was exactly what Bart wanted to hear. Heart thumping, he glanced at Kaye. Hope and excitement glimmered in her eyes.

As Klaus explained his team's opinion to the prime minister, his choice of words occasionally betrayed his rivalry with Zirnitra's chief designer. "I would also have reached this conclusion, had the UZSR publicized its technology," he said. "I wish we'd suggested this."

Everyone listened intently to Klaus's conclusion. He was composed, yet spoke

with passion. "If we cut ourselves free from the developmental hell of Hyperion, we'll be able to put our resources to work elsewhere. It's the best option."

Hyperion's lead designer winced, frustrated; Professor Klaus's words were a death sentence.

The professor turned to Kaye. "The UZSR suggested using Arnack's computing technology. The computers for their spacecraft are apparently less advanced than ours. I'd like your opinion on that suggestion, Miss Scarlet."

"Yes, sir!" Kaye was fully prepared for his question. "Completing a lunar landing mission will require a powerful, efficient computer. That doesn't mean we can simply install our computing technology on a Zirnitran ship, though. We'll need to do a detailed inspection."

Computers varied based on their application. Each rocket, CSM, and lunar module had its own computer; the ones in rockets, for instance, ensured a safe launch into space. Since both nations had launched rockets successfully, they wouldn't need to assess those particular computers.

The attendees discussed the HGC next. "HGC" was a catch-all term; in fact, the CSM software differed from the lunar module's. Project Soyuz would require the lunar module's HGC to safely launch the module from the UK into lunar orbit. That was much more complicated than the UK's original plan, but at least they wouldn't have to install new computers.

On the other hand, the proposal required the CSM's HGC to handle rendezvousing and docking with the lunar module. That software had originally been designed simply to send the spacecraft into lunar orbit, then guide its return to Earth.

"A compatibility problem could prevent us from installing the HGC on Rodina," Kaye continued, choosing her words carefully.

Director Kissing's brow furrowed. "Do you foresee difficulties?"

"I haven't seen Rodina firsthand, but I think we're bound to run into issues. Porting the HGC to a new ship *is* possible, but the Hyperion and Rodina designs are completely different. So are our piloting methods. These differences could very well mean more steps along the way. There's no way to know exactly how

difficult or labor-intensive installation would be. Depending on the circumstances, it could pose a formidable challenge."

"And it's hard to believe Zirnitra will send us all their most detailed data." Klaus stroked his chin in thought. "We'll have no choice but to go work with their engineers on-site there."

Kaye nodded. "On top of that, their astronauts are used to full autopilot, so they'll need digital simulator training in partially automated piloting."

"Why didn't we go with full autopilot?" the undersecretary asked, curious.

"Both humans and computers have strengths and weaknesses," Kaye answered.

Humans could use their knowledge and experiences to react to the unexpected, but they lacked a computer's sheer processing power, and they were prone to mistakes when tired. On the other hand, computers could process data rapidly and accurately for long stretches of time, but they could not judge unusual situations or perform repairs. Full automation would also require a huge number of programs and vast sums of the space development budget, so ANSA had aimed for a balance between man and machine. Human hands would aid the computer as it handled the mission's challenging navigation.

"I'm not sure how fully the UZSR will understand our plan to split the mission duties between man and machine," Kaye admitted.

Nobody at the meeting was. The Arnackians thought of the Zirnitran space program as a factory manned by emotionless robots.

As Kaye went on to discuss the software involved, those in attendance could only listen and nod. After all, her research team at the institute had built the HGC from the ground up, and its unique low-level programming language looked like a cipher to anyone unfamiliar with it.

When Kaye's complex explanation ended, Bart stood to explain their tentative schedule. "Multiple test missions will precede the final mission. Each has clear software needs, and we've drawn up a time frame for those. Please refer to the materials we gave you for a more detailed schedule."

Software Design Schedule

- 13.5 months prelaunch: finalize guidance system operation plans
- 10.5 months prelaunch: complete program development
- 8 months prelaunch: complete testing
- Send magnetic tape to supervising production company, run simulations
- 4 months prelaunch: complete memory components

The following schedule leads up to an assumed launch date in December 1969, in keeping with our official goal to complete a lunar landing during the 1960s. We expect HGC installation as of Mission 3. Missions 1 and 2 do not currently require installation of Arnackian computer technology.

1967

■ May: Present

■ End of year: UZSR Mission 1 launch (projected)

1968

■ June: complete Mission 3 review

August: complete Mission 4 review

September: Mission 2 launch

October: complete final mission (manned lunar landing) review

October: complete Mission 3 program development

■ December: complete Mission 3 tests

■ December: complete Mission 4 program development

1969

January: complete final mission program development

February: complete Mission 4 tests

April: complete final mission tests

August: launch Mission 3

- October: launch Mission 4
- December: launch final mission (manned lunar landing)

"We have barely more than a year, you mean?!" the undersecretary cried. "Will that be enough time?!"

"Don't worry," Kaye said calmly. "If we agree to cooperative development, we won't start from scratch. We worked with an expected launch date in mid-1969 up till now, so we have leeway. We intended for this schedule to reduce the likelihood of another fatal accident."

"Oh. In that case, very good."

Kaye turned to the other attendees with a gentle smile. "Whether we collaborate with Zirnitra or not, our goals will remain the same—to send crews safely into space and ensure their return. We'll do our utmost to see these missions through." She spoke with such confidence that it was strangely convincing and seemed to win over several people.

"The road ahead will be difficult, especially given the UZSR's extreme secrecy," Bart added earnestly. "The UK and UZSR have different approaches, and there's also a communication barrier. But our ultimate goal is the same, and we can work together to build something that raises the bar. We've observed that in fields where our countries aren't at odds. For instance, both nations' scientists have conversed, debated, and deepened their relationships at international conferences."

Bart felt that cooperation would be possible if they removed the political barriers, but he also knew that belief was largely unfounded. Other people would have doubts about the nations working together.

The scientific advisor frowned. "If the tell-all *Howling at the Moon* is accurate, everything behind the Iron Curtain is a mess. Can we put stock in Zirnitra's suggestions? And will they really abandon their rocket?"

He was alluding to a photograph the UK's surveillance satellite had snapped over the UZSR. The picture captured an ultra-large-scale rocket Zirnitra was apparently developing. According to UK intelligence, it was called a "C-I" and

intended for a lunar landing.

Professor Klaus quickly responded with open criticism. "Launching a C-I's impossible with current technology. It's an explosion waiting to happen. That's the very reason the UZSR contacted us to suggest cooperation. Their space program is no doubt at a crisis point, just as ours is. Do you see what I'm saying? Space development won't stop at the moon; it'll go *much* further. If we join forces with the UZSR now, not only will we lower costs, but we'll also increase the safety of those endeavors." He was nothing if not passionate.

Klaus's words didn't stir the undersecretary, who still had doubts. "Professor, your opinion is based on the premise that we can share outer space peacefully. Has there ever been an age in human history that lacked conflict?"

The argument went on for some time, and at its heart was the problem of the lunar landing itself. Zirnitra's proposal had included a few conditions. The most problematic were the requirements that Lev Leps be the first human to set foot on the lunar surface and that the crew include Irina Luminesk as a symbol of strong race relations.

The proposal had justified these two greedy demands as compensation for use of the UZSR's spacecraft. Unsurprisingly, they provoked no small amount of backlash among the attendees.

Despite that, Bart's heart fluttered. He trembled with excitement, not at the thought of his brother being among the first humans on the moon but of completing a lunar landing through international cooperation.

Unfortunately, very few people besides Bart and Kaye were tolerant of the UZSR's demands. Many felt that compromising this particular historic first would be accepting defeat. ANSA had laid out its lunar module so that the captain exited first upon landing. Therefore, accepting Zirnitra's terms would make Lev Leps captain by default. ANSA and the Arnackian government opposed the demands vehemently, insisting that UK citizens would balk and the mission's caveats would face opposition from all sides.

They were right, of course. After the *Howling at the Moon* press conference, during which Lev espoused cooperative development, an Arnackian newspaper conducted a survey: "Should our space program collaborate with the UZSR's?"

The vast majority of people were in favor, answering "if it benefits the program budget"—on the condition that a UK astronaut set foot on the moon first.

"If all we'll do is help another nation achieve a historic feat, we're better off pulling out of space development entirely," the undersecretary said with a snort.

The prime minister disagreed. "Impossible. Canceling the space program completely would just saddle us with tens of thousands of unemployed citizens. Should Zirnitra complete Mission 1, we'll have to accept their conditions to retain our dignity as a global superpower. If we turn their offer down at that point, we'll undergo a humiliating defeat—and to add insult to injury, the whole world will criticize us for rejecting a golden opportunity for international collaboration."

Yet the terms of the lunar landing mission had to satisfy both nations for cooperative development to begin, and finalizing them was no simple task.

"How about astronauts from both nations jump onto the lunar surface at the same time?" the prime minister suggested, grasping at straws.

The lunar module's lead developer shook his head. "Lunar gravity is one-sixth of Earth's, and we reduced the weight of the module's ladder accordingly. It's very fragile, and any careless accidents will jeopardize a safe return to Earth."

That left the attendees dredging for a compromise, but none had any good ideas.

"Is it possible Project Soyuz *itself* is a trap?" asked the scientific advisor, who was wary of the mission involving Arnack's secret manned surveillance satellite. "The satellite may not be ready for practical use yet, but we risk the Zirnitrans stealing the technology if we let them inside."

"Let me make this clear—that manned satellite's a huge waste of funds," Professor Klaus fired back. "Unmanned probes are more than adequate, given our technological advances."

The debate went on, with no sign of the attendees reaching consensus, until Director Kissing somewhat forcefully brought it to a close.

"Okay! Here's what we'll do," he said grimly. "We'll have the media position

Arnack as morally superior, and we'll keep a firm hold on the people's goodwill by claiming the lunar landing relied on our domestic technology. Zirnitran news outlets blurt lies constantly. The world's much likelier to believe our reports."

If cooperative development led to a successful lunar landing, the UZSR would boast ceaselessly that Lev Leps was the first human to stand on the moon. But the UK could take a different angle. They could claim they'd provided the advanced science and technology necessary to the mission for the sake of world peace and humanity's long-held wishes, working together with another world power to put a team of astronauts on the moon. At the same time, the lunar missions would be a fantastic promotion for commercial computers; the computer business *was* expected to expand rapidly.

"We'll need Arnack One's two computer supervisors to put some weight behind those promotions," the prime minister said with a somewhat pained grin.

Bart and Kaye both agreed, but he noticed his partner's expression's waver. Perhaps she wasn't enthusiastic about the idea; Bart felt likewise half-hearted. Of course he wanted praise and recognition for their software, but neither he nor Kaye were entertainers, and speaking in front of people still made him uneasy.

The long, arduous meeting eventually reached its end. All the UK could do now was wait for Project Soyuz's first mission, which had two possible outcomes. If the UZSR's manned lunar orbit succeeded, the UK prime minister would have to bring himself to accept their conditions. Failure would rule the Space Race a draw. That would end both nations' lunar landing projects and rule out collaboration.

As far as the UK's on-site projects went, hiring and development continued in secret, as though taking for granted that cooperative development would go forward. The Department of State and Department of Defense were also working behind the scenes to get on the same page as opposing factions and keep news outlets from leaking anything classified.

With the meeting drawing to a close, the prime minister looked at the attendees and announced his next step. "I'll report to Queen Sundancia in a few

days for approval, but I believe we all know already what her answer will be."

Everyone nodded. Bart knew full well she'd agree. Perhaps nobody in Arnack wanted cooperative development as badly as Queen Sundancia.

"Once the queen voices her support, we can at least use that to rebut citizens opposed to the project," the undersecretary said.

It made Bart angry to hear the undersecretary shift responsibility to the queen, and he wasn't alone. Not one person appeared to agree with the smug remark. The man seemed to shrink in place, mumbling an apology.

Director Kissing cleared his throat and concluded the meeting. "Will the UZSR actually attempt manned lunar orbit? And will they succeed? Only time will tell."

It was almost midnight when the meeting ended. Bart and Kaye, utterly exhausted, bought cans of cola from a vending machine in the Manned Spacecraft Center and sat on a bench by the window.

Bart removed his glasses and gulped his cola down, savoring the bubbly refreshment as it washed over his tongue. "Cooperative development," he said, heaving a long sigh of relief. "There's a mountain of challenges to overcome, but I sure hope we get there."

Kaye looked at the ceiling. "So much responsibility..." Those three words were a peek into the dhampir girl's true feelings, although she'd been brimming with confidence during the meeting. Merely designing software for the exploration of unknown worlds was an undertaking of its own. Now Kaye had the unenviable job of making that technology work aboard a Zirnitran spacecraft.

She lifted her arms in a long stretch, letting out a deep breath. "Still, the HGC really was on the verge of going to waste," she added, expression brightening. "I'm thrilled that we found a way to apply it elsewhere."

"So am I. We were really hanging on by a thread for a while. It all hinges on Mission 1 now, though."

"I can't begin to imagine installing a computer on a UZSR spacecraft," Kaye

admitted. "I haven't even seen a real Zirnitran ship. All the designs they've released publicly were essentially fabricated, and the same goes for their rockets."

"They are astonishingly secretive," Bart agreed.

Kaye sipped her cola. "Then again, maybe it'll be easier than we think. At the end of the day, we're all people. We have the same goals and build ships with the same resources. I'm hoping against hope that it'll be simple."

"I guess the big problem will be the language barrier," muttered Bart. "But what if the engineers over there are like the rumors say? What if everyone's like a robot out of a science fiction novel?"

If the nations collaborated, Bart's workload would just get heavier. There would be tests, progress reports, simulator practice observations, constant meetings...and all for both nations. Just thinking about it gave Bart a headache. He'd never been much of a "people person" to begin with. Then they'd need to submit reports...

Nevertheless, Bart had gotten good at this kind of work. The moment he'd entered ANSA, he was thrown headfirst into D Room—the so-called "Vampires' Nest." Soon afterward, he'd found himself juggling PR tasks; he sometimes had to speak in front of tens of thousands of people. Those experiences had strengthened him, but he still felt it'd be a hassle to work with foreigners unfamiliar with Arnackian computing. He was nervous—what if they were hard to get along with? What if a fight broke out for some reason?

"Nothing's even been decided yet, but I keep thinking as if going to the UZSR is a sure thing." Bart tousled his hair with a self-deprecating chuckle.

Kaye nodded. "Yup, me too. Speaking of, there aren't any dhampirs in the UZSR, are there?"

"Does that worry you?"

She cocked her head. "Mm... I just wonder how they'd look at me there. I mean, Zirnitrans call vampires a 'cursed species,' right? I'm sure Irina's efforts changed that somewhat, but still."

You'll be fine. I'll be right there with you, Bart should've said, but he was too

embarrassed and shy.

"You don't think they'd assign us Arnack One work in the UZSR, do you?" Kaye asked wearily.

"No way. That'd give entirely the wrong impression," Bart said, then realized something. "That's why you looked taken aback when the prime minister mentioned PR work, isn't it?"

"Ahh, you noticed?" Kaye grinned wryly. "Honestly, I'm mostly happy to do PR these days."

Bart hadn't quite expected that reply. "Oh. Really?"

Letting out a breath, Kaye explained what she meant, her finger wiping a drop of cola from her can. "If the world knows I'm important to the lunar landing project, that can only improve dhampirs' status, right? And if everything goes the way Zirnitra wants, Irina will be on the crew for the lunar landing mission. Then again, I guess they're using her dreams as propaganda to show the world Zirnitra isn't affected by racism or gender inequality."

"Hm... Well, yeah. It's hard to imagine the UZSR's leaders sending a vampire to the moon out of the goodness of their hearts." Bart had been happy to learn that Lev and Irina would likely be part of the crew, but the complicated political reasons for that outcome bothered him.

A touch of sorrow crossed Kaye's face. "I...I just wish the world were a place where dhampirs and vampires weren't used like that. I wish we had a level playing field with humans."

The comment suddenly reminded Bart of the difference between their roles and perspectives. His popularity as a member of Arnack One differed dramatically from Kaye's. Just as publicity had turned the UK's astronauts into popular celebrities, intelligent and beautiful Kaye had become the darling of the dhampir community. On the other hand, the buzz around Bart being the first astronaut's little brother had completely petered out. Now he was merely a sidekick.

"That's probably impossible in my lifetime anyhow," Kaye muttered dejectedly. "It's just... It's tough."

She never would've let her feelings slip to anyone other than Bart. It was only in his company that Kaye sometimes, albeit rarely, let her heart show. She felt pressured by the hopes people invested in her; she didn't want to betray them. In truth, the Arnackian dhampirs' advancement had frightened some humans, making them even more bigoted. It seemed like a problem without a solution, and Kaye's heart ached with each violent incident that affected a dhampir.

Bart always wanted to be some small source of comfort to her. Knowing the weight she carried in her difficult position, he saw it as his duty to support her. He pointed at the silver moon in the sky above. "Hey, Kaye. Not long ago, people never even thought they'd see someone make a trip to the moon and back during their lifetime. That's exactly what Project Soyuz is going to try to do."

"Yeah, I guess you're right." Her mood lifted a little. "One day, I'd like to see the moon up close, with my own eyes."

"When our rivalry with Zirnitra ends, it'll open space up. Even us engineers will get to go," Bart said with a grin. "The UZSR's upcoming mission is just the first step. I'm sure some politicians are hoping for failure so they can dismiss the whole thing as a stalemate, but me? I'm praying for success."

"You and me both, Bart."

The two engineers stared at the moon, clasping their hands in front of their chests—a quiet prayer for the success of the lunar orbital flight, and of cooperative development. They hoped those prayers would reach people in other countries looking up at the same moon.

Indigo Eyes

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FOLLOWING A MEETING at the Neglin in September 1967, Lev and Irina headed to Roza's family home in suburban Sangrad. Roza had sent word that her pregnancy had gone well and that she'd given birth to a healthy daughter. All

the cosmonauts were ecstatic and anxious to visit her and celebrate immediately. Lev and Irina didn't want to cause Roza any bother yet, though, and decided to go by themselves first.

In Sangrad, purple fireweed grew rampant, like an ode to the short Zirnitran summer. Amid those quiet wildflowers was Roza's old stone house. Lev knocked on the front door.

Roza answered, her eyes kind and her face a bit rounder. "The little one's taking her afternoon nap, but please, come inside."

Lev and Irina sat side by side on a leather sofa in the small, neat living room. Roza's medals and awards—all for distinguished service in the field—decorated the shelves. Roza sat across from them.

Looking more than a little nervous, Irina handed her a gift. "C-congratulations," she said awkwardly. "I picked patterns I really liked."

As Irina fidgeted with her hair, Roza slowly unwrapped the present. "Oh, it's so cute! Thank you very much."

It was the standard gift after healthy childbirth—a matryoshka doll set. You could place the dolls, which were of descending size, inside each other. When Roza opened the doll decorated with roses, she found a smaller one. Inside that was another doll, and so on. Irina watched gleefully as Roza set each doll on the table.

Lev gave Roza a tisane that supposedly nourished the body after childbirth. He'd bought it on the recommendation of a colleague's wife. Roza decided to drink some right away. As she went to boil a pot of water, a little voice began crying deeper in the house.

"She woke up!" Roza rushed off to see to her daughter, with Lev and Irina close behind her. She lifted the fussing baby from her cradle, soothing her and murmuring, "Oh, Dasha."

The name meant "happiness." Roza explained nostalgically that she and Mikhail had discussed it while considering their future children's names.

After about five minutes of crying, an adorable smile lit up little Dasha's face. Seeing Roza as a mother was strange for Lev, but at the same time, he hoped

she and her child could live as Dasha's name suggested—peacefully and happily, out of the government's reach.

Irina stood at a distance, staring at young Dasha very intently.

Puzzled, Roza tilted her head and beckoned Irina closer. "She doesn't bite, you know."

"I'm worried she might be scared of me," replied Irina. "Of my eye color, or my fangs."

Roza laughed. "She'll be fine. Why not hold her?"

"What?! Um, but... Me?!" Irina panicked, shooting Lev a troubled glance.

"Why not see what it's like?" he prompted her. "Go on."

That seemed to convince Irina. "W-well, then, I will. But please don't cry..."

The vampire's facial expression was no different, but she seemed oddly stiff and awkward as she clumsily took Dasha into her arms, accepting Roza's daughter like a flake of the most delicate snow.

As Dasha grinned up at her innocently, all of Irina's worries seemed to melt away. "She's so...warm and cute."

A kind, gentle smile floated onto her face, one Lev had never seen. He couldn't help wondering whether Irina would also become a mother one day. His heart skipped a beat as his imagination took another step—would *he* be with her when that day came?

Noticing Lev's stare, Irina gazed back at him. "Do you want to hold the baby?" "Uh...I'm fine," he said, shrugging her off.

When Roza urged him to hold her, though, he held both hands out to Irina. The vampire sized him up, her face doubtful. "Don't you dare drop her!"

"I won't!" Lev wasn't used to holding babies either. He looked just as awkward and clumsy as Irina had. "She's so much heavier than I expected. Um... is this right?" He began rocking Dasha, but the baby's face twisted and she began to wail. "Oh no! Sorry!"

Roza rushed over to save her daughter, muttering, "Lev..."

Dasha's crying told her mother it was time to change her diaper, and Roza did so with neat efficiency. Soon afterward, the baby was sound asleep once more. They went back to the living room, where Roza asked about Project Soyuz.

"Since leaving LAIKA44, I've been completely in the dark," she said. "I suppose that's just how it is. I'm an outsider now."

Lev didn't view her as an outsider at all. He opened up about crucial secrets, including everything Lyudmila and the other higher-ups had met about recently.

After sending the UK their proposal, the UZSR had waited a while before receiving a reply from the Arnackian prime minister. It read, "The UK is glad to consider this proposal in the name of international peace. ANSA will happily send design and engineering experts to the UZSR to confirm all necessary details and work toward finalizing a treaty between our nations, with the mutual understanding that Mission 1 must succeed."

That was exactly the response they'd expected. The National Institute of Science had already begun prepping for discussions with ANSA, and space development personnel were hard at work ensuring that humanity's first manned lunar orbital flight would go well. With Korovin still hospitalized, Zirnitra's engineers and scientists remained somewhat lost but steadfastly enthusiastic; they vowed there wouldn't be another accident. The selected cosmonaut, Stepan Levitzky, was also ready to pledge his life to the mission. He saw it as a chance to honor Mikhail.

"When will the launch be?" Roza asked, worried. "They won't rush and skip the test flight, will they?"

Lev smiled to ease her concerns. "Don't worry. There'll be an unmanned flight to ensure safety before the manned launch. The lunar orbital flight is scheduled for the end of the year, and the development teams are reorganizing to meet that date."

Now that the development sector had freed itself from designing a lunar module—which had been a lost cause—and discarded the ultimately unnecessary related projects, they could focus on the Rodina spacecraft. Such dramatic reprioritization was only possible because the UZSR government controlled the space program. It would've been unfeasible in the UK, where

space development intertwined with private enterprise. Gergiev himself had ordered the dramatic development shift, but Lev detected the strong presence of Lyudmila and her faction in the man's shadow.

"I don't want to see any more reckless, dangerous spaceflights," Roza said, a glint of sorrow in her eyes. "But stopping them is beyond me. All I can do is pray the flight returns safely."

Lev and Irina nodded. No doubt Roza was thinking back to Mikhail's ill-fated mission.

Roza sipped her tea. "Recently, I can't help wondering what kind of place the world will be when Dasha grows up," she admitted. "I feel as though the future's always shifting—as though it hinges on whether cooperative development goes forward and whether we land on the moon." She ran her fingers over the matryoshka dolls lined up on the table. "Perhaps Dasha will have a child, and that child will have her own child, and so on. When will space travel become ordinary, I wonder?"

Lev remembered Queen Sundancia's words at the 21st Century Expo: that, even if interplanetary travel was impossible in her lifetime, they could aim to construct a space station anyone could visit freely. He was about to raise the topic when he glanced at Irina. She was staring at the matryoshka dolls with such intense loneliness that he suddenly couldn't bring himself to speak.

The sun began to set on the far horizon, and the lush green mountains in the distance darkened. Aboard their plane from Sangrad to LAIKA44, Irina kept her gaze locked on the window.

Like Lev, Roza had noticed Irina's somber demeanor during their visit. She didn't point it out as she bade the two cosmonauts farewell, but in her eyes was a message to Lev: *Be there for her*.

Lev felt a familiar heartache, the same one he'd experienced when Roza lambasted him during the party at the space apartments. He still wasn't sure what to say to Irina, or how to say it, but he wanted to say something. "Isn't your village in those mountains?"

She looked at him blankly. "Yes. So?"

As hard as it was, Lev pushed on. "Has anyone there ever married a human?" Irina furrowed her brow in confusion. "Why are you asking that?"

Her response was somehow even more discouraging than he expected. Lev suddenly panicked; perhaps he'd misworded the question. "Well, it's just, when I saw you holding Dasha, I...I realized there are dhampirs in Arnack, but I've never seen any here."

"You know why. Vampires are meant to despise humans," Irina said with a frustrated sigh. She didn't seem to want to have this conversation, but she went on. "That's why we don't marry them. Never. Not my people, and not me."

It wasn't just a retort; Lev saw in Irina's eyes that she outright rejected the very idea of marrying a human. He was lost for words.

Irina let an irritated grin appear on her face. "At any rate, don't you have more important things to think about, like training? Won't you be captain of the moon mission?"

Gloom and sorrow underpinned her words, but he answered her nonetheless. "Uh, yeah. You're right. I do have a lot to think about."

Lev looked away, feeling that if he pushed her any further, the relationship they'd built over all these years would shatter. He mulled her response over. Was she lying, as she had while he prepared to be the first human cosmonaut? Was she warning him not to get sidetracked by love and romance? Did she hold a clear, strong stance that there was a line she wouldn't cross where humans were concerned, or was there something else entirely behind her statement?

However long he thought, he wasn't sure how Irina really felt.

Interlude 1

N OCTOBER 1967, manned spacecraft development remained on indefinite hold in Arnack, but work on the lunar module and computer systems carried on.

The UZSR's National Institute of Science had confidentially informed the UK that Mission 1 was proceeding according to schedule and would launch as the year ended. The nations were still working toward cooperative development, although only a few people knew. As official news stories and press releases on ANSA's progress grew infrequent, more and more UK citizens wondered whether the manned space missions had finally been canceled.

"The government's given up on manned spaceflight!" *Arnack News* reported. "They've hired a famous movie director to shoot fake mission footage instead!" Many believed the tabloid, further confusing the situation. Still, ANSA and the government remained patient, awaiting the results of the UZSR's manned lunar orbital flight.

Meanwhile, Zirnitra's unmanned Diana probes had gathered the data necessary to map the lunar gravitational field. That done, the UZSR moved on to Project Soyuz's first mission.

Professor Boris Graudyn, however, had been working tirelessly on his C-I rocket—and when he stubbornly insisted it was theoretically complete, progress toward manned lunar orbit stalled.

Once Graudyn had convinced the top brass, a test launch was planned. If it succeeded, the UZSR would be able to complete a lunar landing without collaborating with Arnack. Graudyn would be crowned the new chief designer, and he could ridicule Korovin's claims that the C-I was "impossible." The man was nothing if not passionately ambitious, and success would ensure he went down in history as one of Zirnitra's most exceptional scientists.

Lyudmila and her group were informed of Graudyn's actions but allowed him to continue.

"His rocket will fail. Give him enough rope to hang himself," Lyudmila

ordered.

As predicted, the C-I rocket broke apart a mere minute into its launch. Fortunately, there were no casualties. The event decimated Graudyn's hopes and confirmed the UZSR's inability to reach the moon alone.

In December, as scheduled, Zirnitra attempted history's first manned lunar orbital flight.

Chapter 2: Manned Lunar Orbit

Green Eyes

• очи темно-зеленые •

DECEMBER 23, 1967 was a beautiful day, although the temperature was a chilly minus ten degrees. Snow blanketed the area around the Albinar Cosmodrome, and the rocket on the launchpad practically sparkled in the sunlight.

The date of the manned lunar orbital flight had finally arrived. November's unmanned test flight had succeeded, and everything was set. Despite minor concerns, the Black Dragon computer worked brilliantly, and the test craft orbited the moon and returned safely to Earth.

The flight wasn't without issues, however. It went according to plan prior to atmospheric reentry, but a guidance system glitch caused the craft to enter at an unexpected angle over a sea far beyond Zirnitran territory. In the past, unmanned ships projected to land outside the UZSR had been self-destructed, but this craft was recovered thanks to a secret agreement with the UK. Technicians quickly discovered and addressed the guidance system error. They agreed that, during a manned flight, cosmonauts could adjust their landing point by switching to manual piloting.

Still, the UZSR couldn't afford to be careless. They'd succeeded once, but that didn't guarantee their next attempt. It was far easier to enter Earth orbit than lunar orbit. A spacecraft heading to the moon needed to use lunar gravity to change course, maintain balance, and adjust its speed. Therefore, the Black Dragon would operate the engine, controlling the timing of ignition and acceleration. The unmanned test had verified the UZSR's flight calculations, but if their craft ran into unexpected trouble, it would become little more than a metal casket floating in space.

Nevertheless, some in the Zirnitran camp believed success was inevitable. "We'll soon accomplish a historic manned lunar orbital flight," they announced to the world.

Assuming the launch went according to schedule, the ship would conclude lunar orbit and begin its return to Earth on December 25. The UZSR was making a point of completing their flight on that date, which was a holiday around the globe. The tactic was meant both as political propaganda and as pressure on the United Kingdom.

Zirnitra's efforts to publicize the flight left no way to cover up failure, particularly since they'd have to inform the UK of the mission's results. Falling short would crush their global reputation; Gergiev was staking his political career on the lunar orbital flight. From the shadows, Lyudmila egged him on, convincing him that the mission was a chance to improve his standing. In reality, she felt the supreme leader's downfall wouldn't mean anything.

Lt. Col. Stepan Levitzky of the Mechta Shest would captain Mission 1. Its main goal, of course, was lunar orbit. However, Stepan was also assigned important scientific surveyance of the lunar surface. To narrow down potential landing locations, Rodina was equipped with an image sensor that could photograph the lunar surface. Stepan also received a handheld camera to use from within the craft—an Arnackian camera that also used film produced in Arnack. The UZSR had deemed it acceptable for the UK to promote that fact once cooperative development was greenlit.

In the lead-up to the flight, a special envoy from the UK was admitted into the Albinar Cosmodrome for the first time ever. That said, they were heavily restricted. The Delivery Crew met them at the airport, blindfolding them to ensure the Cosmodrome's location remained classified.

Many with ties to the mission flocked to the launch site. Even Gergiev himself decided to appear. That boosted morale, although he did so largely as self-promotion, arranging photographs with both the rocket and Lt. Col. Levitzky.

Stepan, who looked tense, had decided to bring Mikhail Yashin's photograph into space with him. Seeing that the mission captain was jittery, Lev massaged his shoulders and wished him luck. "Make sure to take great photos! We'll all

await your safe return here."

Irina stood by herself, staring up at the rocket on the launchpad. "So, we're going to the moon," she muttered.

They held the traditional send-off ritual before lunch. At Gergiev's signal, everyone knelt and then stood, erupting into applause and cheers. It was a sentimental moment that had played out countless times.

Lyudmila watched it all with a frosty gaze. If Mission 1 succeeded, that would be cause for praise and joy. But she didn't intend to join the others' rituals. Her eyes were on something much further off. To her, the lunar orbital flight was merely a checkpoint on the way to bigger and bolder goals. If Zirnitra failed here, humanity truly was powerless among living creatures. Although humans might've been barking arrogantly in their cradle, all that awaited them was their eventual demise. It was time to prove science's powers.

The cosmonauts packed into Rodina as the launch time approached. It would mark the beginning of a long three-day journey into lunar orbit.

The launch went smoothly, and the craft hurtled toward the moon. Rather than awaiting its return in one week, Gergiev and Lyudmila assumed the flight would succeed and returned to Sangrad. There, Lyudmila prepared for a live post-mission broadcast and negotiations on cooperative development.

Before she and Gergiev left the Cosmodrome, the Minister of Defense and a high-ranking military official made sure to let Lyudmila know they disapproved of Project Soyuz. She retorted by pointing out the C-I rocket's failure, and the minister's face twisted with frustration.

"One day, you'll find yourself shot in the back," he spat.

To Lyudmila, his words were the mere howls of an old dog, a has-been. "At least have the courage to look me in the eye when you do it."

She flashed the minister a daring smile. Pointing her finger as if it were a gun of her own, she fired between his eyes.

On December 25, three days postlaunch, a message from Albinar Cosmodrome reached Lyudmila in Sangrad. It notified her that Rodina had gotten within 195 kilometers of the lunar surface and entered orbit.

The ship's attitude control sensor had overheated and malfunctioned, and steam had interfered with its directional sensor, so the cosmonauts switched those to backup systems. Captain Levitzky had remained cool under pressure, calmly telling the Cosmodrome team his impressions of the moon.

The ship's communications with Earth had cut out as it orbited the far side of the moon. For a while, the team at the Cosmodrome's command center—the "blockhouse"—could do no more than wait and pray that the craft continued traveling safely. Would they fail at that point, or was success around the corner?

Finally, transmissions from the spaceship resumed. "We're back, everyone!" Stepan had cried.

The malfunctioning image sensor had hamstrung their goal to photograph the lunar surface. Nonetheless, Rodina had completed its orbit flawlessly and started its return course to Earth.

"The blockhouse is practically celebrating already!" Lyudmila's contact reported excitedly.

Lyudmila herself felt fire burning deep at her core, but she didn't let it show. "Understood," she replied coolly, then quickly prepared a message for Gergiev to share with the globe via live broadcast.

"My beloved people of the world!" the supreme leader boomed. He practically oozed the moon's wondrous magic; his face wore the kind of grin it hadn't in years. "Our brave cosmonaut team just achieved another historic feat —manned lunar orbital flight! They will now make the three-day trip back to Earth. Let us all greet them with the joy such an achievement warrants!"

The announcement sent shock waves through the world. No one foresaw the UZSR's space program making such a comeback after Mikhail's accident. In the midst of their end-of-year holidays, Arnack's citizens were suddenly unsure whether to go on celebrating or lament. Awkward ambivalence engulfed the UK.

As Gergiev made his live proclamation, Lyudmila announced Mission 1's success to Arnack's prime minister by phone.

The best response the prime minister could muster was a sarcastic joke. "Zirnitra has my thanks for the holiday gift, but I would've preferred a hamburger."

On December 28, six days postlaunch, the spacecraft reentered Earth's atmosphere and landed in the ocean some distance from the planned location. It was recovered thanks to a Zirnitran ship sent ahead of time for that exact purpose.

Television cameras and the beaming Gergiev surrounded Rodina's crew upon their arrival at the Sangrad airport. Stepan's face was a mess of painful-looking bruises from the landing impact. One of his front teeth was even broken, but he saw that as a badge of honor.

"Comrade Mikhail Yashin's bold spirit guided our success!" Stephan cried at the press conference, tears streaming down his face.

Such a storm of cheering and applause ensued that it felt like the land itself, covered in snow and ice, shook.

Peering from her apartment window, Lyudmila enjoyed the pleasant sight of the evening sky. The moon looked larger now, and the stars sparkled a little more brightly.

The world had erupted at the news of Zirnitra's most recent achievement, and while the UZSR basked in glory, the UK was again unable to hide its despair. The Parusnyĭ Shock in 1957 had been followed by the Leps-Luminesk Shock in 1961, and the UK media considered this a third disgrace. They'd dubbed it the Lunar Shock.

Following this mission's success, the UK certainly wouldn't be reluctant to collaborate. Lyudmila celebrated by spreading ice cream on full-moon-shaped butter cookies, then washing them down with wine. Sweetness enveloped her body.

She had little, if any, interest in the moon itself. Yet hearing the news cover

the flight's success reminded her of something—a strange sensation, perhaps of awe, that had stemmed from the sight of a single photograph.

Shortly after Mission 1's return to Earth, the *Istina* newspaper published a full-color picture Stepan had taken with his handheld camera. The government wouldn't generally release such an image to the public, but it so utterly overwhelmed Gergiev that he made an exception. Its publication marked the first time humanity saw the Earth hovering in space with their own eyes.

The photograph showed the desolate lunar surface. Above it, in the darkness of space, floated a blue sphere. It was entitled "Earthrise"—a play on "sunrise"—and was far more powerful and persuasive than the words "successful lunar orbit." The photograph plunged everyone who saw it into the vastness of space. Viewers realized that Earth was their home, and that it was beautiful and precious.

Lyudmila hadn't expected the photo to be so powerful. The moment she saw it, it shook her to the core. She'd laughed at herself. Her reaction revealed that she still had a heart, although the realization didn't please her. Feelings and emotions were a source of bad decisions and bad judgments. They would only get in the way of Lyudmila's goals.

In any case, the door to a lunar landing was now open, and the Space Race between the UZSR and UK would end when the latter agreed to cooperate. Then what? An official compromise would hint at budding revolution and further astonish the world. No doubt it'd make those in power happy.

Gergiev's joyous voice boomed from the apartment television. "With this success, a manned lunar landing is that much closer!"

Lyudmila chuckled darkly. It was time to begin the project that would lead to that lunar landing.

UK, UZSR FINALIZE TREATY FOR MANNED LUNAR LANDING JANUARY 24, 1968

On January 13, the Zirnitra Union and United Kingdom of Arnack signed the "Soyuz Treaty" during summit talks in Sangrad, solemnizing their shared desire to cooperate in the realm of space development. They announced a groundbreaking goal for the collaborative endeavor: "Our nations will work together to complete a historic manned lunar landing."

Directors Volkov (National Institute of Science) and Kissing (ANSA) signed the document, which builds on groundwork laid by a 1967 space treaty. That agreement set forth a goal to maintain peace in outer space.

Volkov and Kissing are set to lead their respective nations' development teams, which will conduct a series of test missions prior to the manned lunar landing. The UZSR recently completed the first such test mission (a manned flight into lunar orbit). Three additional test missions are already scheduled: an Earth orbit rendezvous and docking test, a lunar orbit rendezvous and docking test with a lunar survey component, and a final moon landing test utilizing the lunar module.

The Soyuz Treaty includes a provision stating that the failure of any test mission will nullify the project.

At a recent press gathering, Supreme Leader Fyodor Gergiev commented, "I expect that by now you've all seen the *Earthrise* photograph, yes? There's but one Earth in space, so Zirnitra reached out to propose cooperation in the name of humanity's dreams, and of peace in space. By joining forces, the UZSR and UK can send to the moon, not one country's representatives, but representatives of the human race. Only two nations on Earth have the technology to do so, so we are glad Arnack signed on with such grace. Today marks a change in the season! The cold winter is over. A warm spring is on its way, and a hot summer awaits."

It has been eleven years since Parusnyĭ One began the Space Race in 1957. Now the former Eastern and Western rivals have united and set the manned lunar landing's launch date in December 1969.

Queen's Eyes

WINTER CLOUDS painted the sky a pristine white. Beneath that work of art, the royal dogs played among the bare trees while Queen Sundancia strolled through the palace gardens.

She knelt down to one dog, Kukushka, and whispered, "We're shooting for the moon. And by 'we,' I mean the UK *and* your birthplace—the UZSR. We're working together! We even figured out your role. You're going to get your own stuffed toy!"

ANSA had recently offered to appoint Kukushka the mascot of Project Soyuz. Sundancia thought that was perfect, since the dog was originally a gift from the UZSR to the UK. She'd agreed wholeheartedly.

More than anything, Sundancia was eager for cooperative development to realize its goals. Simply imagining its future brought a smile to her face and indescribable emotion into her heart.

The prime minister felt differently. According to him, agreeing to the Soyuz Treaty was tantamount to losing the Space Race, and it ought to have upset the UK monarch. Much to the royal secretary's chagrin, Sundancia was delighted.

It shouldn't have come as a surprise, though. She'd already eschewed tradition by publicly supporting cooperative development during the 21st Century Expo. Many years had passed since, and she felt the same—although she refrained from promoting collaboration further. Sundancia had been fiercely scolded for her actions at the Expo and harshly criticized as a failed queen. She now spent her days completing her duties, looking up at the moon shimmering in the distance all the while.



The UK space program's tragic accidents had depressed Sundancia, and for a time she'd wondered whether manned spaceflight was over for good. She despised how powerless she was to affect anything despite being queen.

Around the same time as the accidents, the world was abuzz with news of a book written by Zirnitran dissidents. *Howling at the Moon* changed the status quo entirely. It struck Sundancia as a cry for help from the darkness; it was as though Lev and Irina's hearts were calling out to the world. She'd wanted nothing more than to reach out to offer support, but she held back. Entering the fray would just have incited more pointless bickering between their nations, so she could only will her silent prayers to reach the cosmonauts somehow.

As talk of cooperative development spread, the UZSR successfully conducted the manned lunar orbital mission that captured the *Earthrise* photograph. The image deeply impressed even the UK's citizens. There were still people opposed to space development and binational cooperation, as always, but the photograph's release changed things. Individuals saw for themselves how precious and sacred Earth really was. Support for space exploration and world peace suddenly increased, and more people spoke out about environmental issues.

Apparently, even ANSA's flight director—a man notorious for his anti-UZSR stance—found the photograph stirring. He'd ordered the "BEAT THE BLACK DRAGON!" banner's removal from the office wall.

Binational cooperation was set to start soon. The thought of the rivalry ending, bringing hope for a brighter future, made Sundancia's heart soar. They'd face an ocean of challenges on the way to the moon, though, and she hoped there'd be no further tragedies. At the same time, she was struck by an inexplicable fear that a problem at home would blindside them if they focused too hard on the skies above.

The world was changing in leaps and bounds, and greed and hatred could ripple in the wake of that change. Even the queen was at risk of being targeted over such sentiments; her royal secretary was forever warning her to be on her guard. Sundancia could only hope the circumstances didn't result in bloodshed.

Kukushka looked up at the queen with worried eyes, perhaps sensing the young woman's fear and uncertainty.

"Oh, I'm sorry, Kukushka." Sundancia grinned, patting the dog's head. "Don't mind me. I'll be fine."

She quietly prayed for the safety of the two young heroes she'd met at the 21st Century Expo, wishing them luck. The sun peeked through a gap in the clouds, shining brightly as if it had accepted her prayer.

Indigo Eyes

• очи индиго •

On January 30TH, 1968, Lev and his fellow cosmonauts were called to the Training Center for a detailed explanation of Project Soyuz's upcoming missions.

Lt. Gen. Viktor and a supervising director from the National Institute of Science headed the discussion, which started with Mission 2—rendezvous and docking in Earth orbit. That mission would ensure the Rodina CSM's docking equipment could accommodate an Arnackian target drone.

The UZSR's past rendezvous and docking attempts had failed, but they'd recently conducted a fully automated test in which two unmanned probes equipped with cutting-edge docking radars linked successfully. They'd only tested the docking mechanics, not the electrical connection. Regardless, since they planned to install the same docking radar on Rodina, the successful test was promising. The test computer had been the Black Dragon.

Zirnitra had also stopped insisting on full autopilot, a demand that had caused many problems in the past. Mission 2's captain, Zhores Rimsky, could switch to manual piloting when necessary.

Mission 2 would be the first time crafts from both nations connected in space. As preparations carried on, the UZSR also fine-tuned its plans to use the mission as propaganda. They simultaneously prepared for Mission 3, breaking it into four stages due to its extreme difficulty.

Mission 3

(Note: No major revisions from proposal.)

Stage 1

UK launches target drone/lunar probe (repurposed manned surveillance satellite) into lunar orbit. Probe objective is high-definition photography of lunar surface to help confirm a suitable landing location.

Stage 2

Target drone/lunar probe finishes capturing photographs. UZSR launches Rodina CSM with multinational three-person crew. CSM rendezvouses/docks with target drone (most important aspect of mission).

Stage 3

Crew cooperates to board target drone/lunar probe and retrieve high-def film.

Stage 4

Rodina CSM returns to Earth. Cosmonaut team shares photos with globe, promoting international peace and completing mission.

The Zirnitran cosmonaut on Mission 3 would be Semyon, as previously announced.

"Any word on the Arnackian captain?" he asked.

Lt. Gen. Viktor nodded. "We've been informed that Aaron Fifield was nominated."

"Whoa!" Semyon cried, surprised.

Lev's heart jumped at the announcement. Aaron Fifield was a hero in the UK

—its first citizen to fly through space. He'd also crewed two subsequent flights, helping to pull off rendezvous and docking missions. Six years ago—when there were only a half dozen cosmonauts, including Irina—she and Lev had met Aaron in the UK. He was a good man and a patriot.

Lt. Gen. Viktor's briefing continued. "Preparations for Mission 4 and the final lunar landing are also ongoing. Lev, your backup on the final mission will be Stepan. Irina, yours will be a female dhampir astronaut."

The UK's astronaut team included a dhampir man and woman. Lev had heard that was intended to mollify the nation's taxpaying dhampir population.

Well aware that she and her backup were being used, Irina showed little joy at Viktor's statement. "We all know how it has to go—if I can't fly, my replacement has to be a female Nosferatu." Still, part of her was curious. "I wonder what sort of person she is," she muttered to herself.

Viktor informed them that Mission 4's crew was still being selected, then scanned the eligible cosmonauts in their seats. "Now that the treaty's finalized, we've received permission to train with ANSA. You're looking at a long-term stay in the UK, with trips home as needed. You'll receive training based on your specific mission duties."

The countries were finally collaborating. Just imagining it gave Lev butterflies, but it'd be difficult. Everything was different in Arnack—the culture, the customs, the chain of command. Access to technology was important, but so was the ability to work efficiently with one's crewmates. Raising his hand, he asked who the Arnackian member of the lunar landing crew would be.

"Nathan Louis, head of ANSA's astronaut training facility," replied Viktor.

At forty-five years of age, Nathan Louis was the oldest member of the Hermes Seven. His abilities stood out; the UK had even considered appointing him its first astronaut until a routine health check discovered an infirmity. That forced Nathan to switch to a managerial role, but he never gave up. He continued exercising while undergoing treatment, and he earned a master's degree in aerospace engineering. Since then, he'd regained his health and was back in the field. The man was nothing if not persistent.

"Isn't Aaron more popular in Arnack?" Irina crossed her arms, looking more

than slightly disappointed. "Why wasn't he chosen?"

It was clear to everyone whom she would've preferred, but Lev wouldn't mind Nathan being their third crew member—although he admittedly felt a bit awkward about potentially outranking someone older than him.

"The head of the astronaut training facility had final say on the mission crew." Lt. Gen. Viktor's expression was sullen. "In other words, the man wanted to go to the moon."

"Huh? Is he allowed to place himself on the crew?"

"He's trusted by both his peers and the top brass," Viktor replied. "I have to assume they agreed to it. I'm just guessing, but since Aaron's a veteran, the UK may plan to have him captain Mission 3. It's more challenging. That'll also let them appeal to people's emotions during the lunar landing with a winning underdog story about a middle-aged man who overcame illness and flew to the moon."

Irina ran a hand through her hair. "I don't like it one bit."

"No picking fights with him, understand?"

"What's that supposed to mean?"

"It's a warning. You're quick to snap at people you don't like."

Irina flashed her fangs, scowling.

Lt. Gen. Viktor shot her a glare of his own before going on. "The missions will use Zirnitran manned spacecraft, and they'll launch from the Albinar Cosmodrome. In short, the Arnackians will be visiting the UZSR. We'll limit their itinerary as much as possible to protect our development secrets. You'll hear complaints and criticism about that while you're training at ANSA, but you'll just have to bear it."

The military, which still controlled space development, apparently intended to oppose collaboration until the end. Although the government had convinced them that Project Soyuz was "for the glory of the state," they nevertheless refused to be accommodating.

Irina let a mischievous grin spread across her face. "Do we need to write a

follow-up to Howling at the Moon?"

Lt. Gen. Viktor rubbed his abdomen as though he felt a stress-induced stomachache coming on. "Lev," he said sternly, "you're to keep a careful watch over her to prevent international incidents."

"Yes, sir," Lev replied, cringing. Although he would officially captain the lunar landing, he'd never escape supervising Irina.

As the meeting ended, Viktor ordered everyone to continue individual training until further orders.

Lev and Irina headed to the athletic field that evening to build endurance with some jogging. They ran side by side along the 400-meter track, thinking about the UK.

Irina was sweating, but her breathing remained steady. "Isn't the sun in southern Arnack blisteringly hot? I don't like the sound of that. You're lucky you don't have to worry about the heat."

"Actually, even I'm worried," Lev admitted.

He and Irina had both been on lengthy trips overseas, including a ten-day stint across the UK. Yet they hadn't trained in a foreign country. They didn't know how to work with an Arnackian computer or how piloting the lunar module would feel. On top of that, since the UZSR would take up two seats on the lunar landing mission, some UK citizens would likely be hostile toward Lev and Irina.

All the same, flames of hope flickered inside Lev. It came through in his voice. "I'm happy we can finally keep our promise to Bart and Kaye."

"Yeah. Our hands were tied for so long." Irina's eyes glimmered. News of Kaye's successes had made it across the ocean and inspired her.

Lev was also worried about how the UK's tech team would be treated in Zirnitra. At the last meeting, a higher-up from the National Institute of Science said, "We're prepared to accept a *limited* amount of help if it means improving our spacecraft." When the Arnackian envoy had arrived to watch Mission 1 launch, their movements were restricted, and the Delivery Crew had even blindfolded them. The environment was anything but conducive to putting their noses to the grindstone.

Lev wanted nothing more than to greet Bart and his team when they arrived, but he and Irina would be in the UK. Even after their return, it wouldn't be possible—the Cosmonaut Training Center was entirely separate from Project Soyuz's design bureau location.

"I hope they won't have a horrible time," said Lev.

"Get real," Irina snapped. "The Delivery Crew will probably watch them around the clock."

Lev sighed. "Yeah."

He thought back to how courageous Bart and Kaye had been standing onstage during the 21st Century Expo, fighting to win over their superiors. It made him wonder whether there was more to their relationship. The two seemed very close; as far as Arnack One's PR responsibilities went, they were a pair. Were their work and private lives separate?

Lev recognized that that curiosity proved that his uncertain relationship with Irina still partly consumed his mind. Things between them seemed to be at a complete standstill, despite Project Soyuz moving ahead full speed. Irina's words on the trip back from Roza's cast a gloomy haze over him. "Vampires are meant to despise humans... We don't marry them. Never. Not my people, and not me."

Even if Anival's vampires did detest humans, Irina herself should've opened her heart by now. No—she *had* opened her heart, and Lev knew it. Even so, he felt an invisible wall between them. It was different from what had separated them when Irina was known as "N44."

"You're too slow," Irina told him. "I'm running ahead."

Lev didn't try to catch up as she increased her pace. Instead, he watched her put distance between them. He wondered how those scarlet eyes of hers saw him. Scientists could now understand the once unfathomable lunar surface through research, but Irina's heart remained a mystery. The closer he got, the farther away it seemed.

He knew that now wasn't the time to worry about such things. When training in the UK began, they wouldn't have the luxury of indulging in intimate

conversations. He had to get his head on straight and focus on the mission. He couldn't let himself look like a fool in front of Arnack's astronaut team—it was imperative that he conduct himself appropriately. He was the leader of the Zirnitran cosmonauts, and he would captain a flight that represented the human race.

His heavy emotions were coarse as gravel against his heart as he pushed them deep into a lonely corner of himself. Then he focused on Irina, the wind sweeping through her black hair as she ran, and sprinted after her.

Chapter 3: Foreign Countries

Blue Eyes

WITH THE UK AND UZSR linked by the Soyuz Treaty, ANSA and its connected private enterprises started working at a frantic pace. A complete understanding of the UZSR's hardware and systems would be vital to ensure the success of rendezvous and docking procedures from Mission 2 onward.

Engineering heads and production supervisors discussed the development of machinery and parts compatible with the UZSR's. They rushed around visiting factories and facilities, and a group was selected for a long overseas voyage to make necessary confirmations on-site in Zirnitra.

On February 10, 1968, eighteen Arnackians boarded a plane for the UZSR. They were the UK's tech representatives, mostly engineers, led by Division Chief and Flight Director Brian Damon. Nine of the team members were developers or company managers. The remaining eight were from the computing division and consisted of personnel from the computing research lab and ACE employees, including Bart and Kaye. They represented the software development team and would be responsible for supervising the HGC's installation aboard the Rodina spacecraft.

The team was scheduled to stay in the UZSR about two weeks. They'd have to complete a vast array of tasks, but the most urgent was a meeting specifically to exchange information with Zirnitran engineers. When two nations cooperated, mutual understanding was paramount, and in this case Arnack was working alongside a former rival with whom dialogue had barely existed, if at all. The fact that the UZSR classified most of its intelligence widened the ravine between the countries.

This meeting had been scheduled to bridge the gap and allow both sides to grasp each other's technology and design philosophy. Once that was looked

after, the teams would break into their individual divisions and spheres of expertise. At that point, Bart and Kaye would request to install the computer aboard Rodina.

Upon returning to the UK, they and their team would continue developing software; the UZSR would upgrade its own hardware simultaneously. Then the teams would meet once more to discuss things in person. They expected to repeat that workflow until they completed the mission preparations. Once the equipment was finished, the engineering team would contribute to prelaunch discussions and accompany the training astronauts.

Separate from Bart and Kaye, Mission 2's astronauts would likewise train in the UZSR. Bart had also heard that Lev and Irina would soon visit the UK with a few of their own colleagues. They'd be staying at the Manned Spacecraft Center. Long-term training in Arnack was vital for the cosmonauts, since the UZSR lacked a high-quality training simulator or lunar module of its own.

Bart had looked forward to catching up with Lev and Irina, but on this occasion they would pass each other by, their work taking them in opposite directions. They might have no chance to reunite. Still, he knew they were bound to meet again so long as they accomplished their missions. After all, the spacecraft attempting the final lunar landing needed a UK computer onboard.

Flossy streaks of white snow covered the land as the UK team arrived at the airport near Sangrad. Descending the plane hatch ramp, freezing wind nipped Bart's cheeks, making him shiver. Although this was the same Earth, he felt in his bones that he was landing on an entirely different world. He braced himself for what lay ahead.

Kaye, on the other hand, lifted her hand to lazily cover a huge yawn.

"I can't believe you're not even nervous," Bart muttered.

"I'm just so sleepy..." she replied.

Bart was exhausted too. There was an eight-hour time difference between the countries and no direct flight. Including transfers and stopovers, they'd traveled for more than a day. He was on the verge of yawning himself when Division Chief Damon, who stood at the front of the group, glared at him. Bart instinctively swallowed the yawn and stood at attention. He was there on behalf of Arnack's engineers and had to look the part. Moreover, if he made a misstep, he might be erased from the face of the Earth. That danger existed in the country they'd chosen to visit.

Before leaving the UK, the whole group had attended a lecture from Arnack's foreign affairs, defense, and intelligence departments. Their warnings took the wind out of Bart's sails. Suspicious activity and criticizing the UZSR would be strictly prohibited during the trip. In a worst-case scenario, a team member might find themselves in custody and unable to return home. They were specifically told *not* to ask about *Howling at the Moon*'s accuracy—not that Bart intended to. According to Arnackian intelligence, more than half the book's contents *were* true, making it something of a guide to the far side of the Iron Curtain.

Passing through customs with the UK group unnerved Bart further. A full body frisk was a given, but the customs officer even examined Bart's glasses carefully, looking for a hidden camera or recorder.

"They're just glasses, I swear!" Bart protested. It was ten minutes before he was finally released.

After getting through customs, the team headed to the airport lobby, accompanied by the shady-looking secret police known as the "Delivery Crew." Bart might've been sleepy earlier, but now he was wide awake. The lobby was full of reporters and cameras, and a small stage had been erected especially for a welcome ceremony. Around it, Zirnitran citizens smiled warmly, waving small UK flags.

It was the first time since arriving that Bart felt at all relieved. At least the citizens are normal.

The welcome ceremony was a simple affair. Division Chief Damon and Director Volkov shook hands and made a few sweeping statements about the countries collaborating, and just like that, it ended.

Afterward, the smiling civil servant acting as their guide led the team to a private bus that shuttled them to Sangrad. They'd receive an introduction to the

UZSR, including a tour and meal, before the first joint meeting.

Sangrad had fewer people and cars than an Arnackian metropolis, and buildings were generally smaller. There was a much stronger military presence, and everything was very orderly; there was no litter on the streets.

Kaye was glued to the bus window, enraptured by the cityscape. "What's that?" she asked, peering at a huge monument pointing skyward.

"That commemorates Parusnyĭ One's flight," their guide said proudly. "It's called the Monument to the Conquering of Space!"

The bus circled the monument, then headed for the next stop: a fine-dining restaurant. The food was lavish, and the service was amazing. There, the UK team could finally relax and chat. Although Bart couldn't help feeling wary of the Delivery Crew's ever-silent, ever-suspicious gazes, it dawned on him that they weren't too different from the UK's stoic, intimidating bodyguards.

After the meal, the bus left Sangrad for the place they'd spend most of their time: the Space Research City of Kosmos. They left the highway for snowy country roads that eventually opened onto a newly paved route. The beautiful flowers flanking the road struck Bart as another warm, hospitable gesture.

"It's like a welcome message," he whispered to Kaye. "Maybe those lecturers back home were just scaring us so we'd be on our best behavior."

"Mm-hmm." Kaye heaved a little sigh of relief. "The fact that they mentioned getting kidnapped had me on my guard this whole time."

Just before they had a chance to relax, the bus drove into a gloomy forest. A barbed wire fence and closed gate came into view, complete with armed guards on either side. The bus stopped, and a strict entry procedure began.

The relief melted from Bart and Kaye's faces. The UK had high-security locations, but Bart couldn't imagine ANSA running classified military testing facilities.

"Uhh..."

He realized then that the UZSR's space program must be under army purview, since the military managed equipment development. They'd spend two weeks

with the Zirnitran *military*. The UZSR had invited the engineering crew, so it wasn't like the military would harm them outright. Still, Bart's head echoed with very specific terms: "imprisonment," "custody," "house arrest."

Despite Kosmos's daunting exterior, the city itself was like any other industrial urban area. Superficially, there was nothing that odd about it; citizens strolled the streets as they did in Sangrad.

Their guide must've noticed the group's wariness. "Kosmos is the heart of space development in the UZSR!" he began, pleasant yet informative in his delivery. "The design bureau is responsible for creating historic spacecraft. We're far south of the actual cosmonaut training facilities, but I'm sure you'll work at those too as development continues."

Bart gathered that those "facilities" comprised the "LAIKA44" *Howling at the Moon* discussed, but he was scared to actually ask for clarification.

Their guide pointed out Kosmos's residential and manufacturing areas. Then his voice dropped suddenly. "I have one request of you all. There are various facilities here in Kosmos, and we ask that you never, never, never visit any irrelevant to your duties."

The sheer insistence in his tone gave them the creeps. Bart and Kaye exchanged a glance and nodded, silently agreeing to be very, very, very careful.

The bus reached a simple but modern hotel on the outskirts of the residential sector. As the team alighted, their guide informed them that Zirnitra had built the three-story building specifically for the Arnackians. Nearby, construction was underway on additional apartments for the many engineers who'd work on-site. This first delegation was small, but the UZSR expected that hundreds of engineers might visit at once after cooperative development truly got underway.

The UZSR's efficiency was surprising, and a step like this suggested that they were serious about collaboration. On the other hand, Bart was skeptical. There was likely another reason they'd bothered constructing all-new accommodations—each room almost certainly hid recording devices. Bart thought back to a warning he'd received before leaving: "Watch what you say, even if you're talking to yourself."

Everyone had a hotel room to themselves. Bart and Kaye's were next to each other on the third floor. Though the hotel looked new and beautiful, and each floor had a designated maid, the rooms were plain—each a cramped affair stuffed with a simple bed, sofa, and table. The wallpaper was uneven, and the doors had warped just enough that fully shutting them was tricky. It felt like a hastily put-together dormitory, but not a single person made a complaint.

Bart gazed out the window. Snow covered the area, and amid it was a single black car. He saw a Delivery Crew agent inside, using binoculars to keep a watchful eye over the hotel grounds. A shiver ran down his spine, but he knew this was ordinary life here in the UZSR, and he'd have to get used to it.

A shriek rang out from the next room. Bart knew right away that it was Kaye, and his heart nearly leapt from his mouth as he sped to the hall. He burst into her room without knocking. "Kaye! You all right?!"

A panicked Kaye sat on the floor, her hair and shirt drenched. "Bart!"



"Um, what the ...?"

"I turned on the faucet, and suddenly my shower started running! Now it won't turn off!"

Bart was about to look at the plumbing himself when a maid rushed in with a toolbox. Moving as if on autopilot, she shut off the water quickly with a well-practiced hand. Then she curtsied deeply to Bart and Kaye, who'd been left in stunned silence.

"My apologies," said the maid. "This will be fully repaired while you attend the welcome party."

The woman promptly left. Kaye was still stunned—and still drenched, her wet shirt allowing a glimpse of her brassiere. Looking anywhere but her direction, Bart muttered, "I, uh...I'll see you at the party, then."

He returned hastily to his own room. Despite looking neat and attractive, the hotel had clearly been constructed cheaply just in time for their arrival. It struck him as mirroring the UZSR's own ongoing concern with appearances.

That evening, the first floor of the hotel hosted a welcome party with a standing buffet so the nations' engineering teams could meet. About sixty core members of Project Soyuz's science and technology teams attended, including engineers, scientists, the lead developers of Rodina and the Black Dragon, and Director Volkov. Hotel servers made their rounds, offering the Arnackians shots of a drink called "zhizni."

"It means 'life,' and it's our lifeblood," their guide explained. "Life" was quite a name; it came from times long past, when alcohol was essential to survive in the cold weather.

Before giving a toast, Volkov stood and gazed around the room seriously, his cane in his hand. "Just between us," he said, "a number of tonight's Zirnitran guests are constituent members of a secret society called the Party for Future Technological Development. Our media disguised that society as an individual—the so-called 'chief designer'—and some of you came to think of him as 'Sorcerer of the East.'"

So the chief designer isn't one man, but a group? The claim struck Bart as dubious. He suspected it was a lie to hide the identity of whichever guest actually was chief designer. None of the gathered Arnackians pushed the point. Several wanted to ask, but they knew the danger of poking their noses too deep.

"Well!" Volkov's expression relaxed as he held up his glass. "To the lunar landing's success. Cheers!"

"Cheers!"

The Zirnitrans downed their glasses in a single gulp. Bart felt he ought to do the same, but as the zhizni neared his face, its intense aroma hit him and burned straight through his nostrils. He took a small sip instead. Even then, it seemed to ignite his mouth, and he let out a squeak.

He couldn't hide how impressed he was when Kaye drank her zhizni impassively. "You really are tough."

"It's about as strong as Moonlight District moonshine," Kaye said, giggling.

Bart felt the Zirnitrans' eyes watching them—or more accurately, Kaye—very carefully. That was probably due not to her impressive zhizni-drinking abilities but to the fact that she was the most important employee in Arnack's computing division. No one in Zirnitra yet possessed Kaye's wisdom and technical know-how. She was also the only dhampir among the guests.

People at events often stared when they saw Kaye for the first time, and they usually ended up lining up for a chance to talk to her. Yet none of the Zirnitrans spoke to her. In fact, not a single invitee from *either* country said anything to the other nation's guests. They'd brought their voices together for Volkov's toast, but clearly they'd be taking stock of each other for a while.

Bart sensed the Zirnitrans' desire to be good hosts to the foreign visitors, but they seemed unsure of how to do so. The UK and UZSR had been on the brink of nuclear war just a few years earlier and had interacted little since. Nobody was sure how to bridge the gap; that went as much for the Arnackians as it did the Zirnitrans. They all knew that, although they were the same kinds of people on the same Earth, politics and history had built an invisible wall between their nations.

Now that he'd arrived in Zirnitra, one more worry filled Bart's heart: uncertainty about how the UZSR treated Nosferatu.

When Bart joined ANSA in 1961, dhampirs had been persecuted, including Kaye and her coworkers. Aspects of that situation had improved, but a clear line still separated humans and dhampirs, and the clashes between them had grown more serious. The UZSR made a point of extolling gender and race equality on the international stage, but it was a mystery how things stood behind the Iron Curtain. If *Howling at the Moon* was accurate, and Zirnitrans indeed considered vampires a "cursed species" that could be inhumanely experimented on without consequence, would Kaye be mistreated as well?

Bart had actually brought that up with Kaye before leaving Arnack. The dhampir girl told him she was used to discrimination. "Whatever happens, happens," she'd said bluntly. Nevertheless, Bart knew better than to take her at her word. He realized Kaye was putting up a strong front. He kept praying she wouldn't get hurt and that they'd be safe completing their duties in their Zirnitran workplace.

Kaye stirred him from his thoughts with a tap on the shoulder. "Want to grab something to eat?"

"Sure," he replied. Just drinking would make for a rough evening; it was a good idea to have some food.

Bart and Kaye felt all eyes on them as they walked to the buffet table. They recognized borscht, a famous Zirnitran soup, but they'd never even seen the rest of the dishes. In general, there were lots of vegetables and few fish. On one corner of the table, the Zirnitrans had considerately served hamburgers and french fries.

Kaye looked at all the food, then glanced awkwardly at Bart. "What do you think has the strongest taste?"

"I don't have the faintest idea."

Her troubled eyes peered at the platter of french fries. There was a mayonnaise bottle beside them. "Maybe they don't use ketchup here."

"You didn't bring any with you tonight?" Kaye had been chastened for

overusing ketchup in the past, so she'd taken to carrying her own with her.

Kaye cringed. "Of course I didn't!"

Dhampirs' sense of taste was weak compared to humans', so they preferred foods with intense flavors humans typically considered excessive. ANSA's cafeteria now had separate counters for the two species' respective palates. When Bart thought about it, they hadn't run into a single vampire or dhampir since leaving Arnack's airport. He had a feeling it might be better for Kaye not to do anything that could shock the Zirnitrans.

"If you're adding mayonnaise, you may not want to drown your food in it this time," he said gently. "We don't want anyone getting the wrong idea."

"Yeah... I guess you're right." A touch of sorrow flashed across Kaye's features.

"What's the matter?" Bart asked, suddenly worried.

"It just occurred to me that, if I use extra mayonnaise and bewilder our hosts, it might cause an international incident." Kaye smiled playfully and put some french fries on her plate, along with an acceptable *human* portion of mayonnaise.

The other Arnackians were also nervous about the impression they'd make on their hosts, but they shuffled toward the buffet table and served themselves. Then they returned to their side of the party to converse with each other and eat. The refreshments were a mixed bag—some were delicious, and some didn't agree with the UK guests in the slightest.

Eventually, the modest welcome party finished. All they'd shared with the Zirnitran team was the opening toast; that was it. The two nations would hold their first joint meeting the next day, and a question still loomed: Could they communicate effectively? To ensure each of Project Soyuz's missions succeeded, they needed to demolish the wall between them and build a new relationship of trust and cooperation.

Those worries tugged at Bart's mind as he returned to his room, which was dark except for a sliver of light cutting between the curtains. He pushed them aside to reveal the moon floating above the buildings and treetops. Night was

darker in the UZSR, and the moon shone all the brighter.

It was the same moon as always, yet it looked different somehow. That gave Bart a strange sense of relief. At heart, he instinctively accepted that the moon had connected them all up till now. The UZSR's cosmonauts and engineers had thrown themselves into training and development while gazing at this very moon. They'd all had their sights set on the same thing. When Bart thought about that, he didn't feel that communication would be a huge problem. It was something they could figure out together.

Bart wondered whether Kaye was looking at the moon too. Why had her expression grown glum during the party? Maybe she was simply tired? Then Bart realized he too was utterly exhausted. His head was heavy with mental strain, jet lag, and the three shots of zhizni he'd drunk.

He knew that, if he wasn't careful, he'd be a wreck halfway through tomorrow's first joint meeting. He wanted to rest tonight and make sure he'd be in good shape. Turning toward Kaye's room, he whispered good night, then gasped—if the UZSR had bugged his accommodations, they'd think he was with someone.

Outside Bart's now-silent room, a dog's bark echoed through the sky.

There were two weeks ahead of them. Bart hoped the visit would end with everyone a bit closer to the moon.

When Bart got to the cafeteria for breakfast, Kaye awaited him.

"Morning," she said, then grinned. "They fixed the shower in my room!"

Perhaps the heavy facial expression Bart had noticed the previous evening really *had* just been exhaustion. This morning, Kaye exuded her usual calm, kind aura, chomping hungrily on her bread.

Bart was still exhausted; he felt like his body weighed a ton. He rubbed his eyes as he sipped a warm bowl of soup, then realized Kaye was staring at him.

"You look a little bedraggled," she said. "Are you okay?"

[&]quot;I need more sleep."

Maybe because he was in a foreign environment, or because he was so worried about the joint meeting, Bart had barely slept a wink, and what sleep he got was very broken. He told Kaye so.

She promptly rose from her chair and brought him a cup of hot coffee and a handful of sugar packets. "No dozing during the meeting."

"Give me a break," Bart muttered. "You look like you slept great, anyhow."

"I didn't, actually." Kaye glanced toward the spot where she'd grabbed the sugar packets. "I took some of those for when I get tired too."

"Whoa. You mean you're going to eat sugar packets during the meeting, like sugar cubes?"

"Of course not!" Kaye waved off Bart's dubious stare. "I...I'll eat them alone. It'll be fine!"

Bart made a mental note: Pack sugar cubes on future trips to UZSR.

When the UK team left the hotel, a bus awaited them. It was an ordinary charter vehicle except for one detail—its windows were completely covered in cardboard. The shock of such a strange sight woke Bart right up. None of the Arnackians quite believed what they saw; even Division Chief Damon froze in shock.

"Is this for real...?" someone blurted.

The bus driver nodded. "My apologies. The design bureau where the meeting will take place is in a classified district. And, well...rules are rules."

Bart remembered that the special envoy Arnack sent to Zirnitra for Mission 1 had been blindfolded, but that'd been *before* they signed the Soyuz Treaty. Yet the Zirnitrans were still adhering to strict security measures.

Everyone got on the bus a little more jittery than before, only to find Delivery Crew agents already aboard. Aware that their freedom was now strictly limited, the Arnackians took their seats in silence and let the bus quietly carry them into restricted territory.

After about ten minutes, the team got out and followed a Delivery Crew agent to a conference room in a factory-like building. That would be the joint meeting venue. It was easily spacious enough to seat forty, and at the front of the room hung a portrait of Fyodor Gergiev.

Everyone was to attend the first joint meeting and share the most crucial information. Afterward, they'd split into groups based on their field. All the members of the Party for Future Technological Development attending on the UZSR's behalf had been at the previous evening's welcome party.

The higher-ups had decided that this meeting would have two chairpersons. Division Chief Damon was the UK's, and the UZSR's was Director Volkov. By Volkov's side were managers and supervisors who'd helped develop Zirnitra's spacecraft, reaction control system, and Black Dragon computer. They had an intimidating air; tension hovered over the room.

The groups shared a brief greeting, and the meeting began. The first agenda item involved software and hardware development for rendezvous and docking. They needed to confirm the design specs and blueprints for the systems to connect the Rodina spacecraft to the UK's lunar module, both of which had been described in documents and resources shared in advance.

Damon kicked things off by bringing up what both nations considered indispensable: compatible hardware.

Arnack had agreed to provide a target drone as a test lunar module during Mission 2, a manned surveillance satellite to serve as Mission 3's target drone and lunar probe, and an actual lunar module for Mission 4 and the final lunar landing. The design of those crafts differed depending on the mission, but they all used the same docking apparatus. The necessary installations would include docking lights, reflectors, and hardware to monitor craft proximity. They also took it for granted that they'd equip the lunar module with the UZSR's docking system radar.

One major challenge for the nations to overcome was air pressure discrepancy between spacecraft; ignoring that would create the risk of an explosion during docking. They would need to build an airlock module from scratch and install it between the vessels to moderate the pressure.

That project's supervising engineers began discussing the issue immediately. Before long, they ran into trouble—the two nations' approaches to their

docking systems differed. That was a given. Everyone had attended with an understanding that it wasn't just the UK and UZSR's machinery that diverged. *Everything* did, down to how they ran meetings.

That was partly due to the organizations governing each nation's respective space program. The UK had ANSA, which managed projects meticulously. The UZSR lacked a similar governing body, since its space program was under military command.

But—as when choosing ketchup or mayonnaise to accompany french fries—there wasn't a "correct" style. The two nations had no choice but to work together to find a good middle ground. In short, they wouldn't figure out hardware compatibility immediately, and this first joint meeting wasn't even trying to; it focused on exchanging information.

Both nations were working with a time limit and budget cap, however. They wanted fast results and safety measures to keep unexpected accidents at bay. There was still a veritable mountain of issues to discuss and just as many walls blocking their progress. Merely listening to the discussion and debate upset Bart's stomach, and he knew the topic of computing would be full of its own unique problems.

When they finished discussing docking, it was already noon, so the meeting adjourned for a short lunch.

"We can't just tell them to do things our way," Damon said. "They aren't like new contractors from Arnack. They're partners on equal footing."

Bart glanced at the Zirnitrans huddled on their own. Volkov wore a bitter expression and muttered to his groupmates. Both factions were apparently dissatisfied. Bart hoped it didn't erupt into anything worse.

When the meeting resumed, it was time to talk computers. At this point, Bart and Kaye would participate.

"Hopefully our message gets through," Bart mumbled.

"Well, let's give it the best we've got—and keep our heads up!" Kaye balled her hands into fists.

"Mm-hmm. Good call." Kaye had a point. If they got stuck on tedious details,

their listeners wouldn't understand the gist of what they said. They'd experienced that too often in meetings with the top brass back home.

Bart fixed his glasses and calmed himself. It was game time.

The Zirnitran engineers scrutinized him as he flashed a friendly smile and announced, "We'd like to start by confirming the schedule."

They would need to review Mission 3's software fully by mid-June, which was only four months away. Fortunately, they could work from the foundation built during Project Hyperion. Time wouldn't be a problem, assuming there were no major bugs.

After ensuring there were no issues with the timeline, Bart went on. "Next, we'd like to discuss the Hyperion Guidance Computer—the 'HGC.'"

He began a basic explanation, allowing the UK representatives to observe the UZSR's reaction to the technology. Arnack had received a guide to the Black Dragon prior to the meeting, but they weren't certain where Zirnitran computing stood.

First, Bart explained how to program the HGC. That had actually changed little, although computers had advanced. The programming team created punch cards and processed them in batches, then large general-purpose computers simulated elements like spacecraft's flight paths and movements. At that point, the team wrote binary programs and sent them to a textile factory, which wove copper wire around magnetic rings to create computer data storage known as "core rope memory."

The Zirnitrans apparently had no questions about that process, which was a huge relief.

Bart went on to explain the UK's three concerns about moving the HGC aboard Rodina.

For starters, they still didn't know Rodina's exact dimensions and weight. The Zirnitrans explained that there wouldn't be an issue, judging from the documents they'd received. The HGC was 61×32×17 centimeters and 32 kilograms; the Black Dragon was 55×30×30 centimeters and 34 kilograms. The HGC was more powerful, but smaller and lighter thanks to its ICs. The Black

Dragon's developer couldn't quite believe it, and Bart watched him leaf through his documents in shock.

The Arnackians' second concern was whether Rodina's electrical source was compatible with the HGC, and they wondered if spacecraft modifications would be necessary. The Zirnitrans had researched the relevant electric currents over the previous days and found the ship's 28 V DC to be compatible with the HGC.

That left only one potential issue to be addressed—how fully the computer could connect to the spacecraft's control systems. Kaye had asked for clarification on that before they left Arnack, and the UZSR's response had been troubling: "The matter is under consideration."

"We still don't have a solution to this," Bart said, then lowered his voice. "The HGC can manage a spacecraft's hardware operations. It's intended to process more than any human is capable of, and on Hyperion, its signals can synchronize the ship's twenty systems. Problem is, it won't be compatible with Rodina as it is now."

Both Hyperion and Rodina were designed for spaceflight, but their fundamental designs differed. Each consisted of millions of individual parts, making them entirely unique pieces of machinery. The Zirnitran engineers were well aware of the issue, and they nodded with brows furrowed. They tabled the matter for a future meeting, since it would necessitate in-depth inspection of all Rodina's components.

"We'd like to move on to explain the HGC's functions more thoroughly," said Bart. "The computer's one of a kind. It's designed specifically for a manned lunar landing mission."

Bart was very proud of the HGC, which had been the result of years of blood, sweat, and tears. The Zirnitran engineers were beyond curious; some leaned forward in their seats with anticipation before his explanation even began.

The HGC's two main tasks were calculating a craft's position, direction, and orbit, as well as controlling the thrusters during flight to adjust orbit position. It was equipped with a fly-by-wire system, and manual piloting was possible.

"The HGC navigates space via autopilot within the CSM," Kaye explained. "Its radars and measuring systems transmit hundreds of data points to Earth. Large,

general-purpose ACE Alpha computers at our control center receive and process that data in real time, then issue the CSM instructions via voice and data transmissions. Bart, could you please explain how the astronauts operate the computer?"

"Until now, operating a computer was impossible for anyone but an engineer," said Bart. "But the HGC's equipped with DSKY, a keyboard and display interface that lets astronauts issue computer commands—for instance, to correct a flight path error. Think of it like this: In the past, sailors charted their course across the sea using the stars and a sextant. Today's astronauts can use the HGC and DSKY to do likewise."

He kept the summary simple. DSKY—pronounced "dis-key"—was revolutionary, but explaining the invention in detail would just waste time. In the end, astronauts would use it, not the engineers.

Bart and Kaye continued on, going into detail about the HGC's operations. At that point, their Zirnitran counterparts began cocking their heads in confusion; they clearly couldn't follow the specifics.

"To finish off our discussion, we'd like to discuss semiautomatic rendezvous and docking procedures," Bart said.

They needed to ask the Zirnitran engineers for more information. The documents they'd sent the UZSR prior to the joint meeting included a written report on the UK's successful Earth orbit rendezvous and docking mission. The UZSR, however, hadn't shared the results of the numerous rendezvous and docking tests it had conducted with analog computers and radios. Either they were all officially classified or they'd been covered up for other reasons. If Zirnitra continued hiding the information, confirming the compatibility of the countries' systems and methods would be impossible. More urgently, Mission 2's goal was rendezvousing and docking in Earth orbit via the unknown Zirnitran methods.

"First off, you need to explain how your rendezvous and docking systems even work." Division Chief Damon's expression was stern, and his eyes bored into Volkov. "We can't risk astronauts' lives on a mission we don't understand."

Faced with Damon's frustration, Volkov reluctantly and obliquely hinted at his

nation's failures. "I admit, the UZSR's relied far too heavily on our analog computers' autopilot tools. We plan to reconstruct the necessary systems referencing the materials the UK provided."

Volkov's comments served to settle the matter, and Damon's anger cooled.

Just as Bart was about to bring up the rendezvous and docking operations from Mission 3 onward, the reaction control system's lead designer spoke up.

"If Arnackian computers are so advanced, why aren't their rendezvous operations fully automated?" he asked, his beard wreathing an annoyed frown. "My opinion is that autopilot accuracy determines the reliability of a manned spacecraft." He was clearly insinuating that the UK used manual controls because its computer navigation was inaccurate.

"This guy's selling our tech short," an ACE employee sitting near Bart muttered.

That was true. Yet the Zirnitran designer had spent years passionately developing his systems, only to receive orders to scrap them and implement rival technology. Bart understood his frustration, but if they didn't use the best technology available, they'd never reach the moon.

"Well?" The lead designer's glare was sharp.

As Bart sought the right explanation for the UK's thinking, Kaye stood. "The whole basis for your opinion's wrong, though, isn't it?"

Bart's heart nearly leapt from his throat at her bluntness, and it wasn't just the lead designer whose face twisted in rage—the same was true of almost all the Zirnitrans.

Kaye didn't flinch under the pressure. "I'll explain why we implemented manual controls," she said, her tone gentle and clear. "First of all, humans are flawed. How can something imperfect create a perfect automatic system? Simply put, it's impossible. And, while computers *are* truly amazing, they're inflexible. They can't fix problems themselves either. We opted to balance things by having our adaptable human astronauts work *with* our powerful computers."

The Zirnitrans' expressions were grim, and none spoke. Bart felt hatred in

their stares. They didn't like hearing a dhampir—and a woman younger than them all to boot—assess humans. Perhaps they'd never heard someone dismiss the UZSR's approach like this. But none could deny that Kaye was right, and she had the results to back up her words. That was the very reason she was lead software developer.

Bart rose to his feet as well. "Everyone in the UK's computing division, including Kaye and I, will do our utmost to see Rodina achieve humanity's first lunar landing with Lev Leps as captain. That's why we're here—to make that final mission a success. We're giving you what we consider the very best plan. There's a long road ahead, but we all have the same goal. We can enjoy the journey as much as the destination."

His honest message got through to the Zirnitrans. A few nodded, and several others visibly relaxed. Even the bearded designer's glare disappeared. The wall between them was too high to scale, but they didn't need to demolish it. They all saw their dream floating in the sky high above.

The long joint meeting had been full of complex explanations. It had revealed both large and small issues they needed to overcome. Still, it was helpful for both sides to realize that they were essentially more alike than not, national differences notwithstanding.

The group concluded the meeting by determining steps to take toward rendezvous and docking. All relevant technical documentation would first have to be typed up and made available to both sides to analyze hardware compatibility. Then they'd have to define the relevant systems' technical specifications and establish teams, which would allow them to draft and finalize a schedule.

The meeting ending on time and without any major arguments was a big relief. Talk between the attendees suddenly felt less difficult than first thing that morning.

"Wish we could meet back home," one UK engineer said, sighing. "I'll never get used to flying."

A Zirnitran engineer chuckled. "It's not easy traveling out of the UZSR. They won't even give us permission."

Kaye grinned. "Once our communication systems improve, we can talk to each other on monitors from our own countries."

"Well, could you hurry up and improve those, then? It'd sure beat being held captive on that creepy bus," joked Division Chief Damon, who thrust his hands together in mock arrest.

Both nations' representatives laughed. The tension that had filled the air earlier was easing.

Following the meeting, the UK group boarded their intimidating cardboard-windowed bus and went straight back to their hotel. Their work was far from over, though. When they arrived in the lobby, they summarized the joint meeting. Afterward, they discussed the next day's plans over dinner in the cafeteria, leaving the details to each supervisor. Day one of the meetings had passed, but there were still another two weeks to look forward to.

Once they were finally free, the team's Zirnitran guide informed them that they were allowed to explore Kosmos as long as they avoided restricted areas. Most of the Arnackians opted to stay in their rooms; everyone knew they'd have a Delivery Crew agent for company no matter where they went.

Bart wasn't sure what to do at first. He was uncomfortable in the hotel, where watchful eyes and ears awaited. It was suffocating, and he'd been stuck indoors for so long that he was desperate for fresh air. He invited Kaye to go for a walk.

"Sure! I was just thinking I'd do the same thing." She wasn't a fan of the hotelpenitentiary experience either.

The air outside was crisp, and Kosmos had breathtaking scenery. A forest surrounded the city, and stars sparkled in the clear navy evening sky.

"It's s-so...so c-cold," Bart muttered, voice trembling.

He'd known the UZSR was frigid, so he'd brought cold-weather clothing, but the freezing wind seemed to cut through it entirely. After just three minutes in the open air, he already felt chilled to the core. Kaye breathed on her gloved hands to warm them. On top of that, sections of the road were frozen, and Bart was terrified he'd slip and fall if he didn't watch his step. He also couldn't

believe he was really walking around a foreign country with Kaye at his side.

Kaye released a deep breath and faced him. "I'm glad there was less conflict than I expected at the meeting. It really seems like we'll make this work."

"The way you cut down that guy gunning for autopilot scared the crap out of me," Bart mumbled.

She laughed. "I just didn't think he'd get it if I danced around the point."

"Makes sense. Handling the Zirnitrans with kid gloves won't get us closer to what we want either...and it's not like we have the luxury of time."

Bart suddenly felt like they were being watched. Glancing over his shoulder, he saw a Delivery Crew agent walking a set distance from them. He found himself concerned about the guy, although he didn't need to be; he wondered whether the agents struggled to keep up twenty-four-hour surveillance.

Kaye noticed the agent too and giggled. "When you outlined the HGC's capabilities, the Zirnitrans were all taking notes so diligently. I think they'll come to grips with the tech very quickly. I mean, if I were Zirnitran, it'd drive me crazy that my rivals had equipment I couldn't figure out. I'd set my sights on understanding it ASAP." Her finger drew an arc from the horizon to the stars above. "Once we map the stars, computers will help us guide a craft to the lunar surface. I'm sure we can do it now that we have the UZSR's help."

Bart knew that Kaye was envisioning a route to the moon that he couldn't possibly imagine.

"We'll lead you to the moon!" The words jumped back into his mind. Kaye had sung them as they walked the streets in protest back in the summer of '61. Bart had been right there with her, carrying a banner emblazoned "FLY YOU TO THE MOON."

People had considered computers a nuisance back then. Now, they were the heart of the lunar landing project. The world was changing. Even Division Chief Damon—who'd once decorated his office with a banner that read "BEAT THE BLACK DRAGON!"—was joking with the Zirnitrans. The dreams they'd been clinging to would soon become a reality.

In the freezing night air, Bart felt a passionate fire in his heart. Back when he

was a sickly, bedridden child, he'd peered at the moon through his telescope. Now it was closer than ever. He'd taken a job in space development, and he was part of the historic international journey toward a lunar landing.

Indigo Eyes

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THE COSMONAUTS ARRIVED in Arnack on March 27, 1968. Their team consisted of seven crew members for Mission 3 and beyond, including Semyon, Stepan, and the backups. Lev served as captain. Mission 2's crew remained in Zirnitra, since they wouldn't need to train in the UK.

Lev sighed heavily. It had been a long trip. The voyage from Earth to space was virtually instant, but the one from the UZSR to the UK felt like it lasted forever. Including plane transfers, it had taken over a day. Although Lev and Irina were used to international travel, jet lag still weighed them down, and the rest of the team was just as exhausted. Even the usually robotic Delivery Crew agents looked spent.

A blonde woman awaited them at the plane's exit doors. She glimmered with a certain glamour, and an ANSA ID card hung around her neck. "Welcome!" she called. "Long time no see."

Lev and Irina recognized her as Jennifer Sellers from ANSA's Office of Public Information. She'd accompanied Bart and Kaye to the 21st Century Expo. Now she was the cosmonauts' official guide, and her presence made one thing clear: They'd be doing PR work.

Jennifer greeted the whole team and quickly got down to business. "Here's the deal. Arnack's using this to promote a global message of international cooperation."

Noticing the cosmonauts' shock—since they weren't used to UK-style public relations—Jennifer explained the campaign's importance. Arnack's citizens

weren't happy that the nation was relinquishing the moon mission's most important role to a Zirnitran cosmonaut after pouring huge sums of taxpayer money into space development. It was crucial that the UK promote the idea that space development enriched the world and was a step toward peace and prosperity for *everyone*.

"I know we're giving people excuses," Jennifer said with a dry laugh, "but if they keep making a stink, we can say goodbye to the entire space program. We'll all need to play our parts, if you don't mind."

The pressure in her gaze was undeniable, but she spoke deferentially. Apparently, she wanted to come off as humble to the foreign guests; Lev seemed to remember her addressing Bart and Kaye much more bluntly.

According to Jennifer, some 3,000 journalists in the UK were covering Project Soyuz. The vast majority wanted to cast the proceedings in a positive light. Still, this wasn't the UZSR. There were no censors, so some muckraking journalists did want to dig up a scoop or attack the endeavor. The secretive, isolated UZSR was the perfect target for them.

Zirnitra had entered into cooperative development willingly, but the country played its cards close to the chest. When Bart and Kaye's group had reached Sangrad for the joint meetings, the press covered only the welcome event at the airport. Ordinary citizens had no idea where the joint meetings were held, what they covered, or how they went.

The cosmonaut team, on the other hand, could access the meeting minutes. They knew the two-week stay had gone as intended and that the UK technicians had returned home to run fundamental design and specification inspections. Irina and Lev were primarily relieved to learn the meetings had concluded without major clashes.

Lev regretted that Bart, Kaye, and their team were essentially kept under house arrest in Zirnitra, with no real choice but to put up with the restrictions. But since they'd gained access to state secrets, perhaps constant watch was safer—otherwise, they'd run the risk of being labeled spies.

When Lev and his team arrived in the airport lobby, they were met by a flurry of camera flashes and cheers from those who came to welcome them. Police

also held back a small group of protesters carrying placards that indicated their disapproval of the joint project and space development in general.

Irina stared at the protesters, then spun toward a Delivery Crew agent. "If someone did that back home, it'd be straight to prison, right?"

The agent nodded.

"How kind the police here are," Irina muttered. Noticing a placard emblazoned with the message "GO HOME VAMPIRE!", she clicked her tongue.

"Don't play their game," Lev warned her. "You'll just rile them up." She pouted.

"Tomorrow, we'll give your team a talk on dealing with the media," Jennifer told them. "Unlike the UZSR, the UK doesn't control it. Tabloids like *Arnack News* can cause real damage."

"Oh? Really, we should probably thank them," Lev said.

Irina giggled. "For the sales, you mean? If anything, they should thank us." Jennifer cocked her head quizzically. "What do you mean, 'thank them'?" "Uh, nothing. Forget it," replied Lev.

When he and the others published *Howling at the Moon*, they knew *Arnack News* would jump on its contents. The cosmonauts had used the paper to spread their book across the globe. That was, of course, highly classified.

Leaving the airport, the cosmonauts hopped on a bus. New Marseille's Manned Spacecraft Center was about thirty minutes away.

The UK's winds felt gentler than Zirnitra's, and a beautiful red hue covered the sky as the evening sun melted into the sea. This was the first time any cosmonaut aside from Lev and Irina had seen Arnack with their own eyes, and the team couldn't help gawking. Several had never watched the sun set over the ocean, having spent their lives in the UZSR's landlocked main region.

The ocean sunset wasn't all they were seeing for the first time. There were high-rise buildings everywhere. Billboards stood side by side, and countless cars

crowded the streets. The UK was the very definition of "bustling," jam-packed with commodities and products. This affluence shocked the Zirnitrans, who came from a nation where even food was scarce.

Jennifer grinned at the wide-eyed cosmonauts, who brimmed with curiosity. "Outside your duties, you're free to enjoy the city as you like."

"Hell yes!" shouted Semyon, ready for a night on the town.

Knowing just how rowdy a "night out" was for Semyon, Lev had to pull rank. "The moment anyone learns you're a cosmonaut, it'll cause a scene," he said. Moreover, the Delivery Crew agents still had a watchful eye on them in the UK. "Save the fun till we're used to Arnack, all right?"

"We'll go back home before *that* happens," Semyon muttered, deflating as reality hit him.

No one could travel between the UK and UZSR easily. Arnack had only permitted the cosmonauts' long-term stay as a special case, essentially classing them as diplomats. Still, Lev held on to a faint hope that, if the countries' relations improved within Project Soyuz, their diplomatic relations overall might do the same.

As the bus drove along coastal roads into the city of New Marseille, the cosmonaut team practically buzzed with anticipation. They couldn't wait to see the center of Arnackian space development.

Jennifer cut their chatter short, delivering a warning. "I know lots of people welcomed you at the airport, but listen—you're going to ANSA's home base, epicenter of the space program and the place where the fires of rivalry burn hottest. A *lot* of people were floored by the idea of the first person on the moon being Zirnitran." She glanced at Lev.

He nodded, understanding. "We knew that coming in."

"If I were a UK citizen, I'd especially hate me," Irina interjected. "At the airport, we even saw protesters who couldn't stand the thought of a vampire on the crew. That bigotry runs deep, doesn't it?"

"Um... Well, there's nothing to worry about," Jennifer replied. "Things have really improved within ANSA. I used to have something of an anti-vampire

stance myself, but now I see them as friends and allies."

"What about people outside ANSA?"

Jennifer winced at Irina's follow-up question. "In the city? Well, look. I strongly advise humans to steer clear of the Moonlight District." New Marseille's dhampirs lived there, and over the years, it'd become more and more of a slum. Ordinary humans didn't go near it.

Irina, however, was curious about the home of those she considered a fellow species. "Is it all right if *I* go?"

"Hm... You'd probably be welcome, but I can't say for sure," Jennifer admitted. "I don't know enough about anti-Zirnitran thinking among dhampirs."

The vampire huffed a disappointed sigh. "Fine."

"I need to tell you one more important thing, Irina." Jennifer's tone suddenly turned emphatic. "A group called the Solar Flare Club targets dhampirs. It's vital that you steer clear of quiet, uninhabited areas after sundown."

"But vampires are nocturnal," Irina said. "I guess it doesn't matter where we go. We'll never have a place to call home."

"If you want to take a walk, just let me know," Lev said.

She rested her head in her hands and stared out the window. "It's fine. I won't go anywhere."

Lev felt conflicted. He'd seen lots of news reports on cooperative development depict space as a place where humankind could truly live without borders. On top of that, both the UK and UZSR were drumming up support for world peace. Those campaigns were commendable in themselves, but neither touched on the conflict between humans and Nosferatu. Including Irina and her dhampir backup in Project Soyuz was symbolic, little more than a gesture toward reconciliation; no *concrete* plans were in place to improve relations. Yet even Lev wasn't sure what could be done, which left him simply watching the conflicts play out on the news.

When the cosmonauts' bus reached the Manned Spacecraft Center, an ANSA security detail held back the huge crowd of journalists awaiting them. The seven

cosmonauts disembarked and entered the facility's main building. All fifty-two members of the UK's astronaut team were expecting them inside. They'd lined up at attention, clearly wanting to impress the media.

Nathan Louis, head of the astronaut training facility, stepped forward. He was about Lev's height and build, but he had the demeanor of a special-forces commander and the dignity to match.

"Welcome to the Manned Spacecraft Center," he said in a low voice, surveying the cosmonauts with a confident grin.

Lev stepped forward on the Zirnitrans' behalf. "We're honored to meet you."

Nathan held out a rugged hand. Lev happily took it—only for his own hand to be trapped in a crushing, viselike grip. The Arnackian's sharp gaze never left Lev's, and his message was clear. His smile was for the photographs. Behind it was a man not yet ready to welcome a Zirnitran, especially one who'd received the role of lunar landing captain through politicking.

Lev smiled back, his own strength pulsing through his grip as his eyes conveyed his determination. I know how you feel. I do. But I will not give up my seat on the lunar landing.

The gathered journalists had no idea this clash between two impassioned leaders was even taking place. They happily snapped photos of the moment the rivals shook hands to confirm future collaboration.

When the formal press event ended and the journalists left, the line of fifty-two astronauts again faced off against the seven cosmonauts. The pressure almost overwhelmed Lev, but he stood straight as he surveyed each member of the UK team.

The astronauts were generally older than the cosmonauts, and their expressions differed. Some smiled at Lev, but most scrutinized him and his team with cautious eyes. Aaron Fifield had the air of a military man carrying out a duty; he didn't seem like the person Lev and Irina had met while touring as goodwill ambassadors.

At the end of the line of astronauts were a dhampir man and woman. Both appeared to be about Lev's age, and the woman had a unique taupe hair color.

She must've been Irina's backup. She didn't even glance at Lev; she only had eyes for Irina.

Various emotions swirled among the astronauts. There was no question that each of the fifty-two had come to ANSA with unique motivations and undergone stressful training, their sights set on the lunar landing. That made it impossible for some to accept that Lev and Irina had been chosen for the mission based purely on their past achievements and their government's whims. Each astronaut's attitude toward the UZSR and vampires like Irina also affected their outlook; it was clear from their faces.

Lev knew one thing instinctively: It'd be impossible to get along with *every* astronaut.

After a brief silence, Nathan spoke on the astronauts' behalf, his tone harsh. "Well, everyone, let me start by making one thing clear: This isn't the Zirnitra Union. For the sake of discipline, you'll do things the way we do them. That means we'll use each other's first names...and we don't want any secrets. We're going to travel through space together for long stretches of time, helping each other and teaming up to fix problems. Trust will be paramount. If you show any sign that you lack the skills to carry out your duties, we'll report that to our superiors. Imagine spending all this money just to crash into the moon! No way. We aren't putting on the worst show in history. Now, we're all on board with the *gist* of Project Soyuz. It's a great chance for ex-rivals to unite and for humans and vampires to work together. But the moment any one of us screws up, that'll go right out the window." Nathan didn't mince words, but he was being forthright.

"I get what you're saying. I agree." Lev smiled confidently. "We don't understand how to use your computers or pilot your lunar module. That's exactly why we stand before you today. I'll be honest—during our missions, all space travel required of Irina or myself was a strong body, a determined mind, and the ability to navigate a parachute landing. I'm sure you all learned that from the book that surfaced recently, so I completely understand that you may doubt our abilities."

A few astronauts looked startled by Lev's honesty.

"After our flights, however, we didn't spend our days merely stargazing. We kept up a strict training regimen so we could understand and pilot our ever-evolving spacecraft. That alone is far from enough, so we're here to learn. Every single cosmonaut in this group came to acquire the skills to accomplish our shared goals."

As he finished speaking, a number of astronauts' faces were less obviously hostile. Even Jennifer looked impressed. Perhaps they'd expected the Zirnitrans would refuse to admit their own weaknesses, instead holding their heads high with pretentious, stubborn pride. At that point, Irina and the other cosmonauts quickly introduced themselves. Following Lev's example, they willingly admitted to their own struggles. More and more of the enmity in the room dissipated.

That said, several astronauts still looked at Irina with malice and distrust. They likely considered it humiliating that one crew member on the lunar landing mission would be a Zirnitran, a woman, and a vampire. Fortunately, Irina didn't need to forge strong friendships with all the astronauts. She only needed her crewmate Nathan's understanding and acceptance, and Lev doubted the leader representing the astronauts would be prone to bias or unreasoning hatred. He glanced at Irina, who looked haughty as always.

When the cosmonauts finished introducing themselves, Lev faced Nathan's team and made a final declaration. "Astronauts of the United Kingdom! I, Lev Leps—captain of Project Soyuz's final mission, and the cosmonaut who will first set foot on the lunar surface—believe we will accomplish our goal!"

Nathan's cheek twitched, and the corner of his mouth curled into a bold grin.

Lev's words made it crystal clear that he didn't intend to refuse his position, which he hoped would draw some of the astronauts' ire from Irina. Despite his defiant statement, being first meant little to him at heart. He felt the lunar landing would be an achievement for Earth as a whole, not any one nation. Actually saying that would only have made him seem tactless, though.

No candidate for lunar landing captain would've pleased the entire world. There would always be some sort of upset. As the man selected for the task, Lev's only option was to become the kind of person who deserved to have his name in history books.

If only Mikhail were still alive.

That thought crossed Lev's mind occasionally. Mikhail had been an amazing man with unrivaled skills; Lev suspected he would even have met the astronauts' standards. But Mikhail had passed away, so it was up to Lev to emulate his friend and become an exceptionally skilled cosmonaut with a passionate soul. Mikhail had entrusted his passion and ambition to Lev, and Lev had his heart set on doing him justice by landing on the moon.

After Lev's short speech, the teams were dismissed, and the astronauts headed off to complete other duties. There was no welcoming party. Nathan's orders had been clear: "We'll build bonds by training." Lev liked making friends over drinks, but friendship wasn't their primary goal, so he didn't mind Nathan's decision. He hoped they'd toast together once they were all on the same page.

Jennifer led the cosmonauts on a tour of the Manned Spacecraft Center. "Most astronaut training takes place here," she told them. "This is also where most of our manned spaceflight research equipment is."

The facility contained a space suit testing room, a space food laboratory, and even a huge open area to simulate outer space. Jennifer described them without hesitation, giving away all kinds of information the UZSR would've kept under wraps.

"The development bases for the lunar module, computer, and rocket are elsewhere in Arnack," she concluded.

"Do Bart and Kaye work here?" asked Irina.

"They did till a few years ago," Jennifer replied. "But I don't supervise them now. They're on loan to a technical institute quite some distance away. They'll be going back and forth between there and the UZSR."

Lev and Irina's shoulders slumped. They'd hoped to catch up with their friends, but Lev tried to look on the bright side. "Hey, we're heading to the moon using a computer they work on. We're bound to see them again."

"Good point." Irina nodded, then spun to face Semyon and the others. "You'd all better work like your lives depend on it. Make sure the final mission launches, do you hear me?!"

"Tch. Always high and mighty, aren't you, princess?" Semyon scratched the back of his head. Still, his eyes were fiery as he added, "We'll do our part. Don't worry."

The other cosmonauts nodded, their expressions resolute and confident.

When the group finished touring the Manned Spacecraft Center, Jennifer asked Lev about lunch. "If you want to eat out, I can make a reservation somewhere quiet."

Lev was grateful for the offer, given the long journey he'd endured, but he honestly wanted to eat something simple nearby and get familiar with the facility as quickly as possible. Irina and the others felt the same, so Lev told Jennifer the staff cafeteria would be fine.

Jennifer was so shocked, she didn't trust her ears. "The staff cafeteria? Even though you can eat anywhere on space program's dime?" Under those circumstances, she told him, plenty of astronauts would've preferred grade A steak. Their cultures were indeed different.

Nevertheless, Jennifer led the cosmonauts to the cafeteria. "Irina, we spoke to the staff in advance, so you can order from whichever counter you prefer."

"Hm? Uh, all right," Irina murmured, confused.

Would lunch work differently because Irina was a vampire? Lev didn't really understand. Before he could ask, Jennifer dropped them off at the cafeteria. Telling them she'd come collect them later, she went to do other work.

As the cosmonauts entered, they saw for themselves what Jennifer meant: There were separate counters for humans and dhampirs.

Irina grimaced. "They don't even try to hide it. I guess it at least makes things easier to understand."

Lev looked around the cafeteria. There were no physical barriers, but the humans and dhampirs sat apart, as though an invisible wall stood between them. The sight confused the cosmonauts, but they didn't want to stand around in the way of other diners.

"We might as well order," said Lev.

"Um, excuse me!" an energetic voice cried out from behind them.

The crew turned, startled, and faced a dhampir girl with taupe hair—the same one who'd stood among the astronauts they met earlier. Her fascinated red eyes were locked on Irina.

"It's a pleasure to meet you all!" she cried. "I'm Odette Felicette. I've been appointed Irina Luminesk's backup!" She lunged toward Irina, apparently disregarding the vampire's personal space.

Irina stepped backward. "Er... It's, um...nice to meet you."

Odette turned back to the rest of the cosmonauts. "The human and dhampir counters are separate because our palates are different," she continued, voice cheery. "Granted, it was partly due to bigotry at one point—that's on the mend, though! It's too bad the two races just kind of sit apart automatically. By the way, do you guys need help? How about I give you a hand?" The dhampir was a real force of nature.

"Um, sure. Thanks," Lev replied.

"Great!" Odette beamed like a ray of sunshine. "Right this way!"

Lev's first impression was that Odette was totally unlike the other astronauts they'd met so far; she wasn't at all aloof. He could see why they picked her as Irina's backup.

Carrying their trays, the cosmonauts followed Odette to a table essentially positioned on the "wall" between the cafeteria's human and dhampir sections. "We can eat anywhere we want, but I chose neutral territory," she told them, laughing.

Everyone in the cafeteria had seen the cosmonauts enter and talked among themselves about it, but nobody actually approached Lev's team. Thus, the cafeteria soon fell silent again.

All the cosmonauts had elected to try dishes they'd never seen in Zirnitra. Lev ate his spicy chili while Odette fawned over Irina.

"You're my hero," the dhampir girl told her. "You're the whole reason I

realized nonhumans could go to space!"

Irina looked mortified as she sipped her okra soup. "Oh. Really? That's great."

Suddenly, Odette lowered her voice. "By the way, all that stuff in *Howling at the Moon* about you being a test subject... Was that true?"

"It was," Irina said simply.

"Oh my God!" Odette blurted, eyes wide as saucers.

"Er...how did you join ANSA, if you don't mind me asking?" Irina's voice was cold and distant.

Odette gasped, then slumped apologetically. "Oh, I'm so sorry! Let me explain."

She outlined her history and career. She'd entered the air force because she'd loved space and the sky ever since she was young. Unfortunately, the UK space program required astronauts to have experience as fighter jet pilots; women were officially barred from that role. Since Odette was a dhampir to boot, she'd given up on being part of the space program and essentially settled for simply being able to fly.

After Irina's launch, the situation shifted, and the government ordered the air force to consider women and dhampirs for space missions. Odette's dream of training as an astronaut finally came true. After a grueling selection process, she got onto the team.

By the time she finished talking, Odette was teary-eyed with memories of the long, arduous path she'd walked. "I know I was selected as Irina's backup because I'm a dhampir. I definitely didn't have any prior achievements. People call it special treatment and snub me, but I can't set them straight—that's exactly what it is." The same was true of the astronaut team's male dhampir, she explained. He felt awkward about being chosen as a backup because he belonged to a vampiric species.

Irina looked like she wanted to say something, but she only managed a small sigh.

Odette snapped her head up. "P-please don't get the wrong idea! I'm top of

our team in terms of *skills*. Humans never would've accepted us if our abilities and training weren't up to snuff." Her face grew troubled as she went on. "But when I think of Nathan's expression as he appointed me Irina's backup...I just know the government pressured him to do it. I feel bad about that."



They'd land on the moon together if things went according to plan, but Lev didn't know what kind of person Nathan was. And, as the Arnackian himself had said, trust was paramount on long spaceflights. "Odette, would you mind telling me a bit about Nathan Louis?"

More than happy to oblige, Odette described Nathan as an old-school fighter pilot, the sort of person as tough on himself as on others. Multiple astronauts had gone to space under his leadership as head of the astronaut training facility. If piloting skill or expertise were officially ranked, Nathan would easily have been vying for first or second place. He was a patriot who'd earned the trust of people both above and below him. It was true that he had yet to visit space, but his simulator results were outstanding; nobody doubted his ability to succeed.

"Subjective, I know, but that's my take on him," Odette concluded.

As far as reputation went, Nathan was perfect. Lev couldn't help seeing him as cut from the same cloth as Mikhail. If Roza's husband had survived, he might've ended up a Zirnitran version of Nathan Louis.

"He chose himself for the lunar landing, right?" asked Irina.

Odette nodded, lowering her voice. "Now that was a surprise. Not just to me, but to *everyone*. Nathan never once talked about dreams of space or the moon, and I never saw him as the type to pursue fame or glory. Nobody complained when he volunteered—we all want him to go. It's just, well... He seems past it now, but he *opposed* Project Soyuz at first."

"We cosmonauts just hope to get along with our Arnackian comrades," Lev said uncertainly.

Odette looked relieved, yet apologetic. "Nobody on our side's welcoming you with open arms, though."

"We know."

"Well, even if they don't go easy on you, the astronauts aren't bullies. You'll earn their respect if you have what it takes." Odette nodded. "They'll put their feelings aside."

"Good to hear. That means we just have to focus completely on honing our skills. Right, Irina?"

"Mm-hmm. We've got lots of time. We'll make things work."

Odette faced Irina with a serious look. "I don't think for a second that I'll go to the moon. After all, that would mean you were no longer on the crew. I'll teach you all my skills and knowledge! Please, achieve your dream—go to the moon with Lev!"

Lev's heart nearly stopped.

"Shh!" Irina covered Odette's mouth in a panic. "No talking about that dream! Are we clear?"

Odette stammered her agreement, but Irina had scolded her too late. The dhampir girl's loud plea attracted the entire cafeteria's attention, and Lev found himself on the receiving end of the blushing Irina's glare.

He cleared his throat and focused again on his chili, trying to ignore the smirks of Semyon and the others. Roza's words rang in his head. "Irina's dream is to go to the moon with you."

The entire world knew that. If Project Soyuz's final mission went ahead, her dream would basically come true, although they wouldn't set foot on the moon for the first time together. So why did Irina frantically avoid the subject if anyone touched on it? Didn't she want to participate in the lunar landing? What did it all mean?

Lev was so occupied with his concerns that his chili—which should've been spicy and delicious—lost its flavor entirely.

The cosmonauts parted with Odette after dinner, then met Jennifer and boarded a bus to their accommodations. Their destination was a newly developed neighborhood in a hilly district near the Manned Spacecraft Center. The area was neatly lined with houses, each with a spacious garden.

"You'll all have your own houses," Jennifer announced casually.

Semyon couldn't quite believe what he heard. "They're quite...luxurious," he

said skeptically. "Why are we getting such special treatment?"

"These houses aren't out of the ordinary."

"They aren't?"

"No. We're trying to provide accommodations equivalent to our own astronauts'."

"What?!" he cried.

The other cosmonauts looked just as shocked, but Jennifer wore a blank, confused stare.

"Are, uh..." Semyon hesitated. "Are cosmonauts here wealthy?"

Jennifer laughed, then explained that Arnackian astronauts were employees of ANSA, a government organization. That meant their salaries were similar to those in the civil service or military. Astronauts typically only earned danger pay during a spaceflight, but they did receive bonuses for appearing in ANSA-sponsored advertising campaigns. And since Arnack's PR strategy was to treat them as stars, it wouldn't have looked good if they lived in squalor. That went for the cosmonauts as well; the UK government didn't want to create the impression that they were neglecting their guests.

Lev nodded as the pieces came together in his head.

"On that note, how well *do* cosmonauts make out in the UZSR?" Jennifer asked, suddenly full of curiosity.

"Hmm..." Lev thought her question over, not wanting to give away too much. "We fly for the honor of our nation, not money or fame." He paused a moment. "Well, that's the official line."

Lev himself actually flew to achieve the dreams he'd had since boyhood. Once he became a cosmonaut, his eyes were set on the stars as he chased after the moon. He couldn't share those exact feelings with Jennifer, but he felt she'd at least catch his drift.

"The honor of your nation, huh?" she chuckled, winking. "I hear you loud and clear."

When they reached the cosmonauts' new residences, the team retired to

rest, ending their first workday. Lev and Irina's houses were across the road from each other at the far end of the community.

Before Irina got inside, Lev called, "If daytime training gets too tough, tell me right away!"

Irina was sensitive to sunlight, but it would've been far too difficult to schedule independent overnight training for her. They'd focused her training on indoor exercises instead. She spent lots of time with humans now, and she was awake during the day more often, so she could withstand heat and sunlight better. Still, training when the sun was brightest was a strain on her.

"I'll probably be fine," she muttered. "Good night."

Lev couldn't help noticing the melancholy in her eyes. Had something happened? Thinking back, he realized she hadn't spoken a word since the cafeteria. As his heart stirred, he called out once more. "Hey! Wait a second."

Irina turned toward him, her face saying she very much wanted to go inside.

"Is this about the dream? Your dream?" Lev asked earnestly.

"Huh? Why bring that up out of nowhere?" She scrutinized him, suspicious.

"It's just... Well, after we left the cafeteria, it seemed like something was bothering you."

"Well, it wasn't that." Irina's denial was blunt. She brushed her hair from her shoulders irritably, the nearby streetlamp's light clearly revealing her pointed ears. After a while, she said, "It was Odette."

"Did she do something?"

When Irina looked at Lev next, her face was full of sorrow. "I can tell that she's honest and passionate. She'll make a wonderful astronaut. But however skillful and talented she is, those abilities were secondary. They chose her as a backup for political reasons, as a symbol of racial reconciliation. It doesn't matter where Nosferatu put down roots as long as we live in a world ruled by humans. We'll always be at the whims of their prejudice."

Irina's honesty reminded Lev of the words she'd spoken to him not long after they met. "Vampires are the People of the Moon. We belong there, and that's

why we're oppressed down here."

Irina hadn't known the human world back then. Years had passed since, and humans had befriended her in that time. But as she traveled, the truth of her statement had evidently struck her. Irina played things close to her chest, and Lev wondered how her crimson eyes saw the world. He knew that, as a human, he might never truly understand.

As he stood still, wordless, Irina flashed an awkward smile. "Sorry. Look, just don't worry about it. I pitied her, that's all. We have a big day ahead tomorrow—new training goals, new things to learn. As Nathan said, all we're capable of right now is the worst show in history. If *I'm* part of that, well...vampires will never have a place to call home."

Lev wasn't sure Irina had fully explained her feelings, but he knew her desire to reach the moon was genuine. He decided to stop prying and instead do his best alongside her. "We'll be counting on you, Irina. You're our pilot, after all."

"We'll count twice as much on you. Don't let them steal your seat, Captain!"

"Not in a million years. We're going to the moon together."

He reached out to her. Irina extended her own delicate fingers, and they shook hands. Unlike the handshake that had revealed Nathan's fiery, competitive spirit, this one was firm with their bond of trust. Lev felt the passion hidden beneath Irina's cold skin. Shadows still haunted her expression, although perhaps they were a trick of the moonlight.

Lev's house was a stylish structure equipped with the newest appliances. Turning on the television, he laid his tired body on his bed. A commercial themed around a lunar landing played, followed by the Bees' sweet melodies. Lev zoned out until his own face appeared on-screen, startling him.

It was part of a news segment on cooperative development. The newscasters were discussing the space program over footage of Lev and Nathan shaking hands at the Manned Spacecraft Center, and their tone was critical. "Are these measures to achieve a lunar landing really necessary? Aren't we just asking the UZSR to steal classified information?"

In Zirnitra, it would be unfathomable for the media to attack state decisions so openly. Lev thought this objective criticism seemed healthier—not that that made him feel better as one of the report's targets.

Irina's image flashed onto the screen. Her expression was blank, so there was no way to know what she was thinking, but the anchors' faces were stern. "Many oppose the decision to send a Zirnitran vampire on the eventual lunar landing mission rather than an Arnackian astronaut. There's every chance this will only damage human-dhampir relations."

Watching them scapegoat Irina sickened Lev, and he turned off the television. What did the news anchors know? None of them had even spoken to her in person.

He hoped Irina hadn't watched the same program in her own house. As his mind wandered back to her earlier sorrowful expression, he strolled to the window and opened the curtains. Irina's residence was outside.

"Huh?"

Irina sat in a rocking chair in her front yard, staring at the night sky. It was dark, so Lev couldn't make out her face from this distance. He saw her lift her hand toward the stars, though, and blue light flashed between her fingers. She held the moonstone necklace generations of her family had passed down.

Irina appeared to whisper something; Lev wondered whether it was the poem of the moon. Her hair fluttered in the evening breeze, and her red eyes glittered in the moonlight. With the windowpane between them, Lev felt as though he were watching something divine and otherworldly.

Then again, we really do live in different worlds.

Humans and vampires inhabited the same Earth, but their past conflicts had built a wall between them. They couldn't truly understand each other's emotions. That bothered Lev. He felt a pang in his left arm where Irina had bitten him.

Much as he wanted to go outside to her, he controlled himself. What would he even say, after all they'd already discussed? Perhaps nighttime in a foreign country was making him sentimental. Pushing down the feelings bubbling up

inside him, he shut the curtains.

Lev was going to captain a flight that would represent everyone on Earth. He had to be strong and dependable. He couldn't afford to look helpless or clumsy while the entire world's media had its cameras on him.

He clenched his fist, and the sensation of Irina's handshake ran through his palm. We're going to the moon, and we're going together.

The next morning, the seven cosmonauts gathered at the Manned Spacecraft Center. Twenty Arnackians were also in attendance—the mission flight crew, their backups, and their ground control crew. The UZSR training uniforms were black with indigo details, while the astronauts wore yellow. The colors clashed, but Project Soyuz's emblem had been sewn onto the chest of each uniform to instill camaraderie.

Aaron Fifield walked up to the cosmonaut team. He carried a paper bag. "It's a pleasure to see you again."

"It's been a long time," replied Lev.

Aaron grinned. "My little brother Bart's eager for you two to fly in that spacecraft he's working on. Kaye's just as happy."

"Oh, glad to hear it!" Lev shared a smile with Irina at the news.

Aaron held the paper bag out to them. "This is a gift from all us astronauts. We're sure it'll help you train."

"Thank you!"

Nathan put his hands on his hips. "Go on, open it."

Pulling a small wrapped box from the bag, Lev began to unwrap it.

Irina tried to look inside. "I wonder what it is?"

Suddenly, a giant snake lunged out at them. The pair shrieked as the serpent struck Irina's forehead.

"Eek!" she squealed, falling on her behind.

The snake rolled over on the ground. It wasn't a real snake at all, but a spring

toy. Lev and Irina had walked right into the trap, and the astronauts burst out laughing. Aaron guffawed so hard he clutched his stomach.

"S-sorry!" Odette held back her laughter as best she could. "It's a rite of passage!"

Lev scratched the back of his head, embarrassed. Irina was simply dumbfounded.

On the other hand, Semyon cackled as hard as the astronauts. "It's a *toy*, Irina!"

"Shut up!" She grabbed the snake and hurled it at him.

"Vampires aren't good with snakes, then, huh?" Nathan grinned.

"Something like this would catch anybody off guard!" she retorted.

"I'll need you to be cool under pressure. You never know what trouble you'll run into in space."

"W-well, I'm sure there won't be *snakes*!" Irina cried, pouting. Her face was beet red.

After the so-called "rite of passage," the cosmonauts and astronauts grouped off by crew and introduced themselves. Lev would captain Project Soyuz's final mission, with Irina as CSM pilot and Nathan as lunar module pilot. Their respective backups were Stepan, Odette, and an astronaut named Jack who had rendezvous and docking experience.

Nathan was in charge of the training, and he quickly got down to business. He was built like an athlete, and age didn't seem to have slowed or weakened him in the slightest. "First up, the CSM. We'll fly Rodina for the final mission, but its computer still hasn't been installed, and we don't have a simulator for it. So, we'll use Hyperion simulator equipment for now. During the final mission, you'll need to handle over eight hundred commands—that'll require more than ten thousand keystrokes."

Irina gulped nervously. Those numbers would've been untenable in the UZSR.

Nathan raised an eyebrow. "No need to worry too much. The engineers rigged up a control panel even a kid could operate. You'll see for yourself soon

enough." When Irina sighed in relief, he shot her a glare. "The spacecraft's *not* fully automatic, though. It's *semi*automatic. We won't reach the moon just sitting on our butts."

"What kind of work will the mission entail?" she asked.

"The crew will need the technical know-how to correct course errors. When there's trouble, you may have to fix it on your own. It's also crucial not to slack on maintenance, so that no equipment breaks down. Then there's temperature control—too much sunlight could damage the propellant tanks, but if the spacecraft temperature drops too low, the cooling systems will freeze. The craft has to keep rotating slowly to prevent those things. It's called 'passive thermal control,' but we named it 'barbecue mode.' Finally, we have to keep fuel cell release in mind. We'll have a lot on our plates, in short."

"We cosmonauts will master every task necessary," Lev said calmly.

Nathan nodded, then went on, "Those tasks I just described would apply aboard Hyperion, but apparently some components won't even function once we move the HGC aboard Rodina. We'll need other strategies to deal with those. Heard anything about that, Lev?"

"Nothing so far."

"Good. When it comes to that computer, a whole lot isn't locked down yet, and speculating just wastes time. We'll do what we can for now."

Lev was curious about the "other strategies" Nathan mentioned, but the man was right. They could only leave those in the engineers' hands.

Nathan clapped to get everyone's attention. "Well, let's start by confirming the lunar landing itinerary. We've got to complete thirteen steps from launch to return, each with unique dangers. Mess up one of those, and we're dead." Taking a moment to look at each cosmonaut to confirm their focus, he added, "The paper I'm handing out now outlines the flow of the final mission."

Project Soyuz: Final Mission Itinerary

1. Manned spacecraft launches via rocket from Albinar Cosmodrome.

- 2. Spacecraft and rocket leave Earth orbit.
- 3. Spacecraft prepares to enter lunar orbit and detaches from rocket.*

 *Although step 3 marked Project Hyperion's lunar module meeting point for rendezvous/docking, docking for Project Soyuz will occur in lunar orbit.
- 4. Spacecraft begins inertial flight to moon (duration: approx. three days). Astronauts watch for navigation/equipment errors.
- 5. Spacecraft enters lunar orbit.
- 6. Spacecraft rendezvouses/docks with lunar module (Rendezvous #1).
- 7. Lunar module descends.
- 8. Lunar module lands.
- 9. Astronaut walks on lunar surface.
- 10. Lunar module leaves moon.
- 11. Lunar module rendezvouses/docks with spacecraft (Rendezvous #2).
- 12. Spacecraft reenters Earth orbit.
- 13. Spacecraft reenters atmosphere, returns to Earth. Mission accomplished.

As Lev read the mission itinerary, the *Earthrise* photograph popped into his mind, and his heart fluttered.

"If we make any errors in plotting our spacecraft's course, we'll miss our destination and fly into the depths of space. And if we miscalculate our speed, we'll collide with the lunar surface," Nathan said calmly. "But the HGC will help guide and control the craft. So, you ask, what's so hard about this mission? What sort of training will we be doing at the Manned Spacecraft Center?" He paused for a moment and looked Lev straight in the eye. "The answer is 'the lunar landing.' That'll be a tall order for both man and machine."

No one in human history, Nathan continued, had ever considered rocketing through space to land safely on an astronomical object with its own gravity. ANSA expected the altitude and speed of the actual lunar landing to align with a hypersonic Mach 5 descent, but their facilities on Earth had no means to confirm that. Scientists and engineers had combined their most advanced

theories, and the landing procedure they'd created was complicated beyond precise calculation. The HGC and ACE Alpha would support the descent, but a crew member would need to complete the last two minutes manually without assistance from Earth. Thus, the landing's success or failure would come down to that crew member's skill.

"I'll explain exactly how to complete the lunar landing when you actually train for it," Nathan told Lev, a twinge of mockery in his tone.

Lev felt the pressure, but his reply was short and sweet. "Got it."

"Let's move on to the CSM pilot." Nathan turned his gaze to Irina. "The final mission crew will face further challenges: rendezvousing and docking in lunar orbit. Success is all but guaranteed, though, thanks to Missions 3 and 4. They'll test the equipment for those exact procedures, so the really daunting steps will come afterward."

Irina waited for him to go on.

"You'll need to remain in orbit once our lunar module detaches, then meet us upon our return." Nathan's eyes were stern. "Transmissions from Earth won't reach you on the far side of the moon. You'll navigate purely on the HGC's guidance. If you run into any trouble, you'll need to address it alone. And if you make a mistake because something weird happened on the CSM, Lev and I will be stuck on the moon's surface."

"I know." Irina met Nathan's strong gaze with one of her own. "Your lives will be in my hands."

Nathan nodded. "How about you assess this scenario? You're in orbit, prepped for our return. Trouble occurs on the lunar surface. Lev and I can't take off. What do you do?"

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"No."

"No...?"
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"I said 'no.' We'll be beyond help."

Lev's blood froze, but Irina didn't say anything.

"You leave us on the moon to die and return alone to Earth." Nathan's logic was so coldhearted it felt cruel. "You can cry all you want, but the computer will be on autopilot. It knows no compassion. It'll take you home, and Lev and I will never know how the world greets you. We'll watch the Earth rise and wait for our deaths." Odette and the other astronauts had frozen in place. The silence enveloping them was only broken when Nathan barked gruffly, "That's why we train! To ensure such tragedies never take place! Understand?!"

"Yes, sir!" the astronauts chorused.

Nathan turned to the cosmonaut team, who were on the brink of being consumed by tension. His face hardened. "The lunar landing mission's still far from locked in. A mission failure would halt the whole project—everything could end with Mission 2. Project Soyuz could also suddenly shift gears. The higher-ups decide everything, after all, and how many of them truly believe we'll succeed? Frankly, they've planned for failure." Frustration sharpened the edge in his voice.

Lev could tell the UK government's relationship with ANSA wasn't entirely good.

After a brief pause, Nathan went on. "In 1957, while I was a test pilot, the UZSR launched history's first-ever satellite. That kickstarted a battle, and Arnack's had to win it ever since. Why? Because a bunch of races—including dhampirs—live here, and we've got to be the best in the world at anything and everything."

So, it was the scheming military and government officials and their plots to quash the UK that had stoked the flames of rivalry. Lev was sick of it all—and it made him sicker still to know that both countries were spurred on by similar motives.

Surveying the two teams before him, Nathan spoke through gritted teeth. "The top brass forced ANSA to move ahead with Project Hyperion because they wanted to beat the UZSR. We begged for them to delay the launch date. We told them that we needed to rework the equipment. But they denied our requests and pushed for the launch despite the defects, saying that it was less expensive, or a chance to claim victory. Because of that, three of our friends—

three good people—are gone."

Several astronauts had tears in their eyes. Aaron's lips trembled with frustration.

Nathan gazed at Lev. "It was no different in the UZSR, was it?"

Lev shook his head gravely. "No, it wasn't. We should've stopped Comrade Mikhail Yashin's launch, but we couldn't."

Composing himself, Nathan spoke to both teams. "Our nations have lost four astronauts between them. But tens of thousands perished in the war in the East. Countless others are dying from poverty, and the human-dhampir conflict is taking yet more lives. Four astronauts revered as tragic heroes are nothing compared to the unseen murders and deaths surrounding us. And now, under the banner of cooperative development, all of us here are working at the beck and call of those who killed our friends, spending exorbitant sums of money to reach a giant rock floating up in space." Nathan met each and every astronaut and cosmonaut's gaze.

Irina crossed her arms and closed her eyes.

To ease the gloom and grief in the air, Nathan picked up the toy snake and tossed it at Lev. "I told you yesterday, cosmonauts, and I'll tell you again. If you don't feel you'll be prepared in time, don't cling pointlessly to your roles. Bow out with grace. I don't want to put on the worst show in history with a supporting cast of unprepared crew members."

Lev set the snake on a nearby table, peering at the astronauts. If it wasn't a form of enmity—if it was iron sharpening iron—then he welcomed this rivalry. "I told *you* yesterday that we'll make ourselves more than capable of our missions. I spoke not just for myself but for my comrades."

"Hmph." Nathan's message was clear: Then do it. Show me.

"We'll put everything into achieving success," Lev continued, again speaking on behalf of his team. "We're honored to have been selected for Project Soyuz, and we're resolved to overcome any fear of the unknown. We will make it to the moon and we will return to Earth. We will put on the greatest show Earth's people have ever seen!"

A bold grin grew on Nathan's face. "That's the spirit. Let's get to it."

The Manned Spacecraft Center contained numerous facilities intended for Project Hyperion, including CSM and lunar module simulators, a replica Hyperion spacecraft, and a gigantic pool for spacewalk training. It also housed the space food laboratory Jennifer had mentioned the previous day. A nearby air force base contained additional training facilities and equipment.

Not only was the center larger than LAIKA44's Cosmonaut Training Center, there was more money behind it. Lev could see why canceling the manned spaceflight initiative entirely would've provoked criticism and ire from UK citizens.

When the cosmonauts saw the giant crater built especially for lunar surveyance training, they couldn't help letting out awed gasps. Irina knelt to touch it, brimming with curiosity. Awestruck, Lev felt his face relax a little.

Nathan soon cooled their excitement. "Lev, Stepan, you'll do lunar exploration training here. But that'll only make up about 10 percent of your total training time. Project Soyuz's goal is a moon landing, so you'll mostly train in flight simulators."

He explained that ANSA facilities across the nation housed fifteen simulators total; mission objectives determined which one to use. Irina would focus primarily on the CSM mission simulator, while Lev and Nathan would spend the most time on the lunar module simulator.

The cosmonauts' training schedule was meant to provide a thousand hours of practice over the course of seven months. That meant fourteen-hour workdays Monday to Saturday, with eight-hour days on Sundays. Backups would follow the same schedule, accompanied by three astronauts as support crew.

"Let's get into the trenches," said Nathan. "Not all of this will be useful, depending on your role, but it's the first day. We'll run through everything together."

He directed them toward the CSM mission simulator, which was in a space the size of a large hangar. Several huge general-purpose computers stood side by side, powering the strange square object, which you could only describe as an angular mess. It looked like twenty metal boxes haphazardly smashed together. Thick cables ran from the object, which was about ten meters long. Lev thought it resembled a derailed train.

Irina's eyes widened. "I have a feeling I'll see this in my nightmares."

"What? Doesn't it look fun?!" Lev exclaimed. "It's like something out of a science fiction movie!"

She chuckled. "You're such a kid sometimes."

The simulator basically had three main parts: the mainframe, the instructor operator station where supervising engineers controlled and oversaw training, and the crew station for astronauts. That was the awkward object in the middle of the room.

Lev and Irina put on headphones, and Nathan guided them into the crew station. Its interior was just like a CSM cockpit. It was even tilted forty-five degrees to simulate a prelaunch angle. There were three seats; Irina perched in the middle, and Lev and Nathan sat on either side of her.

Looking around the "cockpit," Lev groaned quietly. Countless switches, meters, dials, and other controls filled the walls. This was nothing like the Zirnitran spacecraft they were used to.

Irina noticed the controls immediately too. "So...this is what I'll be piloting, right?"

Her confusion didn't seem to perturb Nathan. "The interior won't be identical. You'll control the computer the same way, though—with DSKY."

"Disk...key?"

He pointed at the twenty-centimeter control panel in the center of the cockpit. "You communicate with the HGC using DSKY. Ground control officers access it remotely from the surface, and the crew can use it as needed."

At the bottom of the DSKY panel was a keyboard. It included keys numbered zero through nine, plus nine more, including "+," "-," "Enter," and "Delete." The panel's top right corner displayed the time as well as the CSM's angle and

coordinates. The top left corner contained twelve indicator lights for different warnings and commands.

"Controlling DSKY is simple," said Nathan. "You give commands using the 'verb' and 'noun' keys alongside a number. For instance, if you enter 'verb thirty-seven, noun thirty-one,' the HGC runs the rendezvous program. 'Verb zero-six, noun sixty-two' displays the CSM's speed, ascent rate, and altitude."

A guide board tucked beside the control panel defined each verb and noun code. For their purposes, so long as those controls were consistent, it basically wouldn't matter if things were different on the real ship. And once it was clear how the HGC would function aboard Rodina, they could develop a Rodina simulator with a corresponding control panel.

Irina peered at the guide board's numbered nouns and verbs. "You said earlier that I'll use eight hundred commands?" she asked Nathan, flustered.

"You'll use plenty, that's for sure. You'll be stabilizing the ship, aligning with the stars for celestial navigation, and of course rendezvousing and docking with the lander. But you won't have to memorize them all. The engineering team will list the necessary commands when you meet with them before the launch."

"So what will I do manually?"

"Well, you might have to fiddle with the ignition to control the flight. In that case, you'd hit the ignition switch, and the computer would calculate the necessary adjustments and timing."

"I see." Irina, like Lev, was relieved that the controls were more straightforward than she'd expected.

"All right. Let's get this show on the road." Nathan gestured to the supervising engineer. A moment later, they heard the sound of blastoff, and the simulator's electronic displays and controls activated. "Take us to the moon, Irina."

"Take you to the moon?" Confused, Irina shot Lev a worried glance. "Uh... Lev?"

"Don't look at me," he muttered.

Nathan raised an eyebrow. "It's your first trip. Just think of it like a carnival

ride. Have fun."

The simulator tilted vertically, and artificial acceleration pressed against their bodies. The stars outside the windows weren't completely realistic, but it really did feel like spaceflight. Lev was overcome with nostalgia, and Irina let out an awed sigh.

"This is amazing, Irina," Lev mumbled. The UZSR did have a simulator, but he couldn't believe how much more immersive the UK's was.

"I know. It's like the one at home is just a toy."

Nathan explained more details about the simulator. Computer signals controlled the stars out the windows, so they could use the DSKY control panel to set the stars' locations in the HGC, allowing for celestial navigation. Lev and Irina continued to stare at the passing constellations until a high-pitched alarm blared through the CSM.

Beep! Beep!

Lev immediately tensed.

"What the...?!" Irina cried, looking around the cockpit.

A mock mission control transmission came from "outside" the vessel: "This is New Marseille! You've got a fire!"

"Lev! What do we do if there's a fire?!"

"Huh?!" he gaped. "First, we...check the life support systems with DSKY!" But how?!

Nathan egged on the panicked cosmonauts. "Captain! Pilot! Respond!"

The dials spun, the meter readings were out of control, and Irina seemed utterly lost. "Wait!" she exclaimed. "The guide board! Which command is it?!"

Referring to the guide board, she punched a few commands into DSKY. The numbers on the display merely flashed; nothing actually happened.

"Gah! Go back to Earth! Oh, maybe this'll work!" With a few keystrokes, Irina launched program P01, and the display went haywire. "What?! What's going on?!"

Nathan had been watching in silence, but now astonishment was plastered across his face. "What'd you just do?!" he barked.

"I commanded it to go back to Earth, that's all!"

"Why'd it stop running?! Did you break the computer?!"

"Don't ask me!"

As they butted heads, DSKY's display blinked and then went completely black. Nathan groaned. Lev and Irina could do little more than stare, mouths agape.

Shortly after the three exited the crew station, the engineers got the simulator back into working order. Lev and Irina were very relieved; if they'd broken it, they would've incurred a hefty repair bill.

"That error wiped all the preceding flight data," the supervising engineer said. Irina's panicked commands to DSKY had relaunched the program out of nowhere.

Nathan crossed his arms. He wasn't letting them off the hook. "If there'd been a fire during our flight, all three of us would be dead."

"Why throw that at me and Lev out of nowhere?!" Irina shot back, agitated.

"Ever heard of a polite fire? One good enough to let you know it's starting?"

"N-no."

Lev jumped in to soothe her battered nerves. "All right, Irina. Calm down. The fire blindsided us—that's all there is to it."

"Lev's right," said Nathan. "You'll need to get through a number of training missions, and the engineers will hurl a range of emergencies at you, not just fires. They expect our crew to handle snags on the fly, even if we're caught off guard. The computer's incredible, sure, but it can't think on its own."

"I just didn't know the DSKY commands," Irina said, no louder than a mosquito.

"You've got lots of duties to master on top of the computer controls. This simulator preps you for life-or-death situations like fires, but it also lets you practice everything else, from shipboard maintenance to food prep. You'll

spend eight hours a day in simulators. Now I wonder if that's enough time."

"You needed me to breeze through all this?" Irina snapped.

"Tsk, tsk. Total simulator proficiency will be the baseline expectation. And even if this technology's top of the line, it's a far cry from actual spaceflight."

"Hmph! I know that. Don't underestimate me. I'll be perfect when the launch date arrives."

Irina and Nathan were like oil and water. Lev was already exhausted just thinking about the future. On the other hand, he was relieved to see Irina being her usual obstinate self. He couldn't detect a hint of the gloom he'd seen on her face yesterday.

Nathan was coming down hard on Irina, but Lev didn't get the sense that it came from a place of bigotry or discrimination. There was logic to his words and actions, and he answered their questions clearly. Lev understood why Nathan was in charge of astronaut training. Odette was right: His expectations were high, but they weren't unreasonable.

After Lev and Irina, it was the backup crew's turn in the simulator.

"Hit the ship with a small meteorite," Nathan instructed the supervising engineer.

Irina cocked her head, confused. "You can cause a specific problem right when you want it? How does that work?" The UZSR simulator had no such convenient function, so perhaps the UK's computers allowed for it.

Nathan was delighted to confirm that the simulator could run complicated programs thanks to its cutting-edge software and high-performance computers. The latter possessed abundant read-only memory to store the programs carrying out important tasks. The machine even recorded simulation data to magnetic tape, so a trainee who failed a mission could repeat it as needed.

Lev was impressed yet stunned by the technological gap between the UK and UZSR. Arnackian computer science was well beyond what he'd imagined. Had the Space Race continued, he mused, it could've meant utter defeat for Zirnitra. And he and the other cosmonauts were only in Arnack because Hyperion development had stalled out.

That reminded Lev of Lyudmila. She'd claimed that back in the '50s, as an exchange student in Arnack, she sensed that the UK would eventually defeat the UZSR. Lev knew exactly how she must've felt. Although he disapproved of her deceitful methods, he had to admit she had foresight. He couldn't help wondering whether Lyudmila and her faction were behind the malfunctions and legal issues that had befallen Hyperion. He hoped he was overthinking things.

Lev mulled over that hunch as the backup crew emerged from their test flight. When the asteroid "struck" the simulator as Nathan commanded, Stepan panicked, but Odette responded with an experienced hand. Afterward, Irina approached Odette and, in a tiny voice, requested her backup's help training on the simulator.

As everyone was about to head to the next training area, the supervising engineer called out to Lev. "Got a minute?" he asked, before going on. "Look, it was completely thanks to Nathan's knowledge and advice that we finished this simulator. We engineers don't know much about astronauts' experiences or perspectives, and Nathan gave us tons to build on. Not just for the simulator either—we figured out the Lunar Landing Research Vehicle thanks to him. Even when he was sick, he bent over backward for our projects."

The man's message was clear from his grudging expression: You've been handed the opportunity to do all this instead of him. Don't you forget it.

"I see," Lev said. "Thank you for telling me."

He absorbed the information without any resistance or pride. In the UK, he was a foreigner—and he was also seen as having stolen the role of lunar landing captain.

Nathan, who'd overheard the engineer, strode over. "It's nothing to talk up," he told the man kindly. "Look. I'm hale and hearty now." He thumped his chest.

"Oh." The engineer ducked his head apologetically. "Of course. I'm sorry."

Nathan's satisfied smile said the rest for him: Thanks for the support.

The exchange illustrated exactly how he'd earned the goodwill of his comrades no matter their rank. Lev felt a heavy responsibility weighing on his shoulders now that he'd taken captaincy from someone so honest,

hardworking, and good.

Soon after, the team made its way to the lunar landing training simulator. It was shaped differently from the CSM mission simulator, but its structure was basically the same, complete with a general-purpose computer mainframe and instructor operator station. Project Soyuz would use an Arnackian lunar module, so the team could train on this particular simulator right up to the final launch.

Irina waited to one side as Lev and Nathan climbed into the crew station, which seated two. The interior was designed to look identical to the real module. Lev glanced at the countless switches, dials, meters, and other components surrounding him. In the center of the chamber was a control panel containing a small computer. On either side of the computer were triangular windows, and under each was a control console. It was all so much to take in; the Zirnitran lunar module was a simple piece of equipment with about thirty switches, dials, and meters.

"This can simulate the descent after the module detaches from the CSM in lunar orbit from four angles," Nathan told him. "As for what we're training on—well, the module will contain two independent computers. Our job will include ensuring that the numbers on those align during descent and that our movements are always accurate." Nathan frowned and paused for a moment. "Now, to be clear, I'll be the lunar module pilot."

"Right."

"But 'pilot' is more a title than anything. Confirming the computer's instructions will be the main job during the lunar landing. I'll give you speed and altitude details, but you'll land the module with your own hands."

Lev sensed that Nathan's description of the task contained a question: *Can you do it?*

At the moment, he couldn't, but he'd ensure he was up to it. With heartfelt determination, Lev responded, "I'll master any skills necessary to the landing. That's what you want, isn't it? I used to be a fighter pilot—I know my way around manual controls and complicated cockpits."

Nathan's lips curled into a grin. "That's what I like to hear. Our module won't

be a mechanical fighter jet, though. It's computerized. If you try landing it like a plane, you'll crash."

"I...I know."

"The captain's seat is on the left; the pilot's is on the right. For this first training round, I'll captain the module. Let's get going."

Nathan and Lev sat at the left and right consoles respectively. As he prepped for the "landing," Nathan explained how the simulator functioned. "The centrifuge controls speed reduction. It operates between 4 and 9 g, ensuring you actually feel the landing. The two front windows are screens. They display an image of the moon that moves as we operate the module." Computers were once again doing the heavy lifting on this complicated system.

A transmission came from the supervising engineer. "Starting lunar descent."

The simulator began to move. Nathan checked the cockpit wall equipment as he told Lev, "Once the lunar module detaches from the CSM, we'll travel at incredibly high speeds. We have to control our descent and aim to land in a flat, safe area. What's important is that we work with the computers and trust each other." He glanced over at Lev.

Lev's heart raced, and tension gripped him. Even so, he tried to give Nathan a look of affirmation.

"Relax. No surprise malfunctions this time," Nathan assured him, then pointed at the central control panel. "Look at this."

Lev followed his finger to a button framed with black and yellow security tape. Beneath it was the word "ABORT."

"On the real mission, we don't want to push that," Nathan said. "It jettisons the descent stage and returns the ascent stage to lunar orbit. If we run into trouble during the landing, using that button will be up to you, but three billion eyes will watch you press it. Understood?"

"Understood!"

At that moment, an incredible pressure akin to Earth's gravity pulled down on Lev's body and soul. The simulator neared the lunar surface. He knew the

scenery was fake, but his heart hammered, his hands trembled, and sweat beaded on his forehead.

Nathan peered at him. "What's wrong?"

"Nothing," Lev replied, trying to keep his cool.

"Look. The fuel light's blinking," Nathan pointed out, voice low. "We're down to 9 percent. We can't use it all. We have to save enough fuel for the trip back."

"How do we know exactly when to stop burning fuel?"

"Mission control will warn us. At that point, we'll either have to land in twenty seconds or hit the 'abort' button."



Lev wondered whether he'd stay composed during the real mission. His knees trembled with fear of the unknown. Stars streaked outside the window, and the moon grew ever larger. The colorless, rocky surface getting closer and closer resembled a vast expanse of rubble. Lev did his best to ignore his thrumming heart. He felt hot, as if all his very blood were aflame.

Conversely, Nathan was cool as ice as he continued maneuvering the lander. "Twenty meters to touchdown. When the sensor probes on the descent stage's landing pads touch the lunar surface, the contact light will blink."

Lev's eyes were glued to the approaching moon as a light on the dashboard blinked blue.

"Contact. Disengaging engine for soft landing," Nathan announced, his voice distant.

Then, finally...

"Okay. Lunar landing complete."

Lev exhaled deeply. He hadn't realized he'd held his breath. Opening his clenched fists, he looked at his palms. His nails had left marks in the flesh.

Nathan snorted. "You just experienced the easiest simulated landing, with the best conditions. Come flight time, we won't know what we'll face. I doubt it'll be that smooth a ride. We'll also have to handle the lander with kid gloves. They made it as light as possible to account for lunar gravity, so parts are paperthin. Its legs could break if we don't land vertically. And like I said, if there's an accident or malfunction on the lunar surface, it's goodbye to our ticket home."

Just imagining that plummeted Lev's mind into a dark abyss. Such a failure would leave him standing on the lunar surface he'd always dreamed of, watching Irina's craft leave him and Nathan and return to Earth.

He felt like he was dreaming. It took all he had to muster a reply. "Got it."

"We're also going to prepare for the lunar landing using two non-simulator machines," Nathan said, his delivery slow, clear, and emotionless. "As I'm sure you're already aware, the instant we land is exceptionally important. It'll decide everything, including the outcome of the labor of more than fifteen thousand

Arnackians. Unfathomable resources and sums have been invested into this project. The future of space development itself rides on the lunar landing, as do the hopes and dreams of three billion people, and the souls of those who fell so we'd eventually stand on the lunar surface. All that will rest on your shoulders as captain."

Lev's fingers trembled. He had no words.

Nathan watched him somberly. "We intend to land on an unknown moon floating three hundred and eighty thousand kilometers away, its gravity and soil completely different from ours. That'll be a miracle."

"And we'll make it happen," said Lev.

Nathan gripped his shoulder. "Your voice is shaking, young Zirnitran."

There was no hiding it from the astronaut. He saw right through Lev.

Slapping the cosmonaut on the back, Nathan left the crew station. Lev heaved a great sigh, finally relaxing. He watched Nathan's silhouette, strong and full of confidence.

I'll get used to this, and it'll get easier, Lev thought. Then it struck him: No, it won't.

There was no getting the hang of this—Project Soyuz's final mission would be the first time anyone saw the lunar surface up close. All he could do was go for broke training here on Earth, committing his experiences to memory and envisioning the approaching flight.

Compared to Nathan, Lev was young, but Nathan would never have addressed Mikhail as "young Zirnitran." To ensure his Arnackian crewmate never called him that again, Lev would master the lunar module even more fully than Nathan had. That was all there was to it.

When Lev left the crew station, Irina was there waiting for him. "How was it?"

Lev looked at the vampire, who tilted her head quizzically. She, too, would have to become a perfect pilot to reach the moon. Without exchanging a word with her, Lev knew she had every intention of doing so.

[&]quot;How was it, Lev?"

"Hm? Oh. Uh..."

With her beautiful red eyes upon him, Lev's tension dissipated completely. "It wasn't the real thing, but it felt like it. My heart was going crazy."

"Whoa. It's really a shame I can't be a part of that. But, well...beggars can't be choosers."

"No kidding!" Odette chimed in, her voice dripping with envy as she eyed Irina. "Flying into lunar orbit will be incredible enough."

"You're right. I'm sorry," Irina said. "At any rate, I've got to up my game. I can't hold a candle to you right now, Odette."

"We've still got a whole year and half ahead of us!" Odette clenched both fists at her chest. "It's about guts! Guts and determination!"

Irina held up her fists as well, mimicking Odette. "Guts and determination!"

Lev was glad to see them getting along. It was a relief that Irina had a trustworthy partner. Unlike the Nosferatu Project, Lev's training would keep him busy for Project Soyuz. His role encompassed unique shipboard duties, so he couldn't support Irina the way he used to.

He couldn't believe that Irina—once terrified of heights—was now a spacecraft pilot. The very fact that they were training alongside their former rivals with their sights set on a cooperative mission was something out of a dream. Yet that collaboration had rendered a miraculous lunar landing possible, and its last step would rest in Lev's own hands.

"Let's get to our next exercise, Nathan!" Lev exclaimed.

His enthusiastic shout provoked a scowl from the astronaut. "Look, I admire your spirit, youngster..."

"Hm?" Lev was perplexed by the implied "but" at the end of Nathan's comment.

Stepan tapped his shoulder. "The backup crew hasn't had a shot in the simulator."

"Oh!" Lev chuckled, mortified. "I, uh...I think it's the jet lag."

"Idiot," Irina muttered.

The two teams' cold glares were nigh unbearable. Lev shrank backward, wishing he could disappear.

On top of overlooking the backup crew, Lev had also forgotten that the lunar module simulator training would be followed by lunch. Thoroughly embarrassing himself in front of everyone had killed his appetite, though. He forced himself to eat a hamburger, knowing he'd need energy for the afternoon, then sat alone with a coffee in the corner, head resting on his hands. He pondered the leader he'd need to become to gain the others' trust and respect, so lost in thought that he didn't notice Irina until her fingers jabbed his ribs.

"Huh?!" She took Lev completely by surprise. He slammed his knees into the table. "Ouch!"

The outburst drew curious, dubious gazes from everyone in the cafeteria. Lev did his best to shrug them off with a laugh. Looking as though he'd done nothing out of the ordinary, Irina sat next to Lev, setting down a bottle of cola.

"What're you doing, Irina?"

"Ever since we got here," she whispered back, "it's like you've been putting on an act."

"You think so?" Lev asked, confused.

"Mm-hmm. It's as if you're competing with everyone. Or trying to come off as the best. It's not like you."

Lev couldn't deny that he'd put up a tough front. When he thought about it, he realized he'd started posturing the moment he shook Nathan's hand. At that point, he'd felt like he couldn't afford to lose, no matter what. He didn't want to be a man outstripped by his rivals. Plus, he couldn't stop dwelling on the fact that he'd captain a flight on behalf of the entire planet.

"Are you keeping your act up the whole time we're here?" Irina demanded. "Can't you just be yourself?"

"Be myself, huh?"

"Listen, Lev. You always try your best. Pushing yourself to do more will only backfire." Irina stared at him, and he saw himself reflected in her clear red eyes. "You are who you are. You can't be Mikhail."

Her words lanced him straight through. Lev had looked up to Mikhail as the textbook example of a skilled, knowledgeable cosmonaut. He'd long felt he carried his friend's legacy with him—as though it were his duty to make up for Mikhail's death.

"You're right," he said. "Thanks. I might've lost myself for a while there."

"Ever since you were just a reserve, I've known what kind of person you are," Irina said with a comfortable smile. "I should give credit where it's due. I'm impressed that a guy with such a rocky history made it all this way."

That was the arrogance Lev had come to love. It brought a smile to his face. "You haven't changed a bit, you know that?"

"No? Is that a good thing or a bad thing?"

"A good thing."

Irina had been herself from the moment they arrived in the UK. Even in the UZSR, she was never obsequious with those in power, and never shrank before anyone. When she and Lev traveled the world as goodwill ambassadors, she'd approached everyone the same way, regardless of wealth, rank, or power. Talking to her reminded Lev of who *he* really was.

Irina finished her cola and heaved a long sigh. She looked toward the sky, something lonely in her eyes. "To me, humans and dhampirs—and the worlds they live in—are the same. I mean, they have different cultures, but..."

"Huh?" Lev studied her face.

Before he could grasp what she meant, Irina rose to her feet, avoiding his gaze. "Lunchtime's over. Let's get back to it." She sauntered away, swinging her cola bottle.

What was she getting at? It sounded as though Irina saw vampires as isolated from both humans and dhampirs. Staying in the UK might've given her food for thought, despite the fact that she mostly seemed the same as always. Lev

couldn't follow the inner workings of her heart, but he feared she'd only rebuff him again if he reached out to understand her fully.

Focus on training, he told himself. That was what he had to do now. No more stupid mistakes, and no need to be more than he was. He'd just be Lev Leps, and he would reclaim the spirit he'd had as a reserve cosmonaut with his eyes on the stars. The thought lifted some weight from his shoulders.

Lev finished his tepid coffee and stood. It was time to head back.

That afternoon, the training group bussed to a nearby air force base where they would practice several skills. The sun was high in the sky, scorching the asphalt. Irina had to pull her hood over her head to protect herself from direct sunlight. Unfortunately, she couldn't ease the oppressive heat, which left her wiping sweat from her forehead with a handkerchief.

"It's still only spring," she mumbled. "This is as hot as summer in Sangrad!"

Irina had gotten more accustomed to daylight, but Lev still worried about her. Adjusting to a harsh environmental change might affect her strict training schedule. He turned to Odette to ask how hot New Marseille got.

"In the summer, you can fry an egg on a car hood," Odette replied.

"What?" Irina cried, shocked. "I'm done for!"

Odette tried to cheer her up. "Luckily, pilot training's mostly indoors, in the simulator. Don't sweat it! You'll be fine...probably."

"I'll gobble down ice to survive."

A nearby ground control crew member heard her comment and shot her a dubious glance. "Speaking of which, that exposé said you were made a test subject partly because you're sensitive to heat. Were you *actually* considered a test subject?"

Irina had been answering Odette promptly, whatever her backup asked. Faced with the ground control crew member's abrupt and aggressive question, however, she remained quiet. Lev wanted to interject on her behalf, but he couldn't think of the right thing to say.

Aaron spoke up. "So what if she was a test subject?"

"What do you mean?"

"What difference does her past status make? The bottom line is that she flew through space."

"Yeah, but she might not have been too different from a guinea pig!"

"Well, if we're digging up the past, maybe we'll start by telling the Zirnitrans yours," Aaron suggested, a slight edge to his voice. "I recollect that your history of playing the field involved a scandal with a movie star..."

"Whoa! Hold your horses!"

The bus erupted into laughter. Lev thanked Aaron with his eyes; the astronaut playfully cocked a brow in response.

Regardless of whether Irina had been a test subject as *Howling at the Moon* claimed, Lev could tell the UK team wasn't familiar with vampires. The plethora of "vampire movies" Arnack's thriving film industry had produced made them a symbol of fear to many, which could create problems for Irina.

Lev pointed that out to the vampire, who nodded. She didn't want to get into it, though, so Lev took it upon himself to debunk the movie myths the Arnackians might believe. Sure enough, there were misconceptions among the UK team; Lev even made Nathan and Aaron aware of facts they hadn't known.

Irina merely hid under her hood and listened in grudging silence. "What a pain," she muttered, pretending to take a nap.

Watching her, Lev understood why she never changed, no matter where they traveled. Irina's tough, belligerent front was a means of self-defense. Wherever they went, humans were ignorant. They always saw Irina as distinct from a human, yet lumped both vampires and dhampirs under the "Nosferatu" umbrella. To Irina, dhampirs inhabited an entirely separate world, even if they shared the same ancestors. That was what she'd stopped herself from saying in the cafeteria.

As the bus rumbled along, Lev wondered whether there was some way he could support Irina. She'd reject him if he tried, though. She'd tell him she didn't need pity or compassion.

Would her loneliness ease if her dream of visiting the moon came true?

New Marseille's air force base was the functional center of the Manned Spacecraft Center's aerial operations. It contained several strange apparatuses the Zirnitrans weren't accustomed to.

First, Nathan put the cosmonauts inside a completely hollow plane. The craft was ominously nicknamed the "vomit comet," so they were already wary.

"This exercise should get you used to spaceflight." There was a certain pride in Nathan's eyes. "The plane will pitch to forty-five degrees at a high altitude, then fly in a parabolic path, producing zero-gravity conditions twenty-five seconds before readjusting to thirty degrees. One practice flight can amount to maybe sixty zero-g sessions. As the plane's nickname suggests, lots of people get sick. But we'll stick to around twenty zero-g sessions, since it's your first time." His expression said it all—*Get yourselves ready*.

Semyon and Stepan whispered behind Lev.

"Think they put this exercise after lunch on purpose?"

"Let's show them the spirit of the motherland."

The plane's sharp ascent and free fall produced a floating sensation that did provoke nausea. But Lev and the cosmonaut team—backups included—made it through without vomiting. None suffered much more than a slight headache or queasiness.

"After the ludicrous training we underwent in the UZSR, we're at least used to this kind of thing," Irina said proudly.

Their fortitude left their Arnackian teammates speechless and awed. "Think it's true that they're actually machines?" one astronaut whispered.

His reaction pointed to just how secretive Zirnitra was. Those outside the UZSR considered its residents incomprehensible people who worked and followed orders robotically. That impression was baseless but unavoidable, since Zirnitra kept citizens' lives under wraps. All the cosmonauts could do to correct the Arnackians was show their true colors as training continued.

After riding the vomit comet, the cosmonauts proceeded to the test site for the Lunar Landing Research Vehicle, a unique piece of machinery developed especially for lunar descent training. Only Nathan, Lev, and their backups would use it.

It was hard to believe the awkward-looking craft could actually approximate lunar conditions. It was seven meters long and three meters tall. Four legs jutted from the pipework frame housing its single jet engine. Thanks to that downward-facing turbofan engine, however, a pilot could ascend into the air using a control stick in the open cockpit. A computer controlled thrust, countering the craft's weight to permit horizontal hovering that simulated lunar gravity.

The first vehicle design hadn't been workable, but ANSA collaborated closely with the lunar module's manufacturers to revise it. With Nathan's input and many years of work, they finally produced the existing training model.

"I've flown more than twenty-five years," Nathan told Lev and Stepan, a stony look on his face, "and *this* is the most dangerous thing I've handled. The gravity just above the lunar surface is one-sixth of Earth's, so to move laterally, you have to tilt the craft six times farther than you normally would. It's incredibly unstable. Strong winds alone crashed the prototype model, and I've needed to use the ejection seat too. I've been the crash dummy, frankly. We improved the model you see here, but make no mistake—one wrong move, and it's all over."

The cosmonauts knew Nathan wasn't just rattling them. They could tell the vehicle was dangerous just by looking at it.

Stepan examined it carefully. "Why build an actual vehicle to train on, not a simulator?"

"Simulators are for learning to pilot or respond to issues. They don't give you a sense of the unique moon-landing gravity," was Nathan's immediate reply. "Right now, though, you need skills like a helicopter pilot's to use the research vehicle."

Lev and Stepan had learned that in advance, and they'd both practiced flying helicopters in Zirnitra. That alone didn't allow them to use the vehicle; they'd first need two weeks of classes and a supervising engineer's permission. The

challenge and danger involved was clear.

"I'll give you a demonstration." Nathan donned a helmet and protective gear. The moment he boarded the research vehicle, the look in his eyes changed. He was like a warrior about to step onto a battlefield.

The supervising engineer gave a signal, and the vehicle rose into the air, firing white smoke at regular intervals. It hovered at an altitude of about eighty meters. It looked unstable, like a rotorless helicopter. Lev could easily picture one wrong move sending it crashing back to Earth. After about five minutes, the vehicle slowly descended and landed at last.

Nathan took his helmet off and wiped sweat from his brow. "This vehicle can't spend long in the air due to fuel limitations. We won't be able to waste time during the actual lunar landing either, though. At any rate, we'll use this twenty or thirty times before the final mission."

Lev thumped his chest with a fist. "If we have to, we'll use it hundreds of times! As many as it takes to earn your satisfaction!"

"We'll invoice Zirnitra for fuel, then," Nathan said, chuckling.

Their first day's practical exercises done, Nathan outlined their remaining training. Among the skills the lunar landing would require, successfully rendezvousing and docking the CSM and lunar module were paramount, so Irina needed to perfect her abilities as CSM pilot. The simulator for that aspect of the mission was located far northeast at the Aeronautical Research Center. Irina would have to travel there in the coming days.

That was also the location of another large institution important to their mission: the Lunar Landing Research Facility. It contained a vast artificial lunar surface, as well as a life-size model lunar module that hung from a gantry crane and could simulate a lunar landing from an altitude of fifty meters. The facility could even connect astronauts to cables to replicate the sensation of a moonwalk.

ANSA facilities and production centers dotted the country, so the cosmonauts would fly to various sites as their training dictated. Since Lev and Irina would have separate responsibilities on the same flight, they'd spend much of their time apart, tackling different exercises.

Over the last few years, Lev had seen Irina almost every day. Digging through his memories to pinpoint their last separation, he realized it was back when Irina became history's first cosmonaut, then lied about going to Sangrad to work at the Chief's design bureau.

Feeling pensive, he mentioned it to Irina, who sat beside him on the bus back to the Manned Spacecraft Center. He spoke in a whisper, since he couldn't let the Arnackians overhear him referencing Korovin.

Irina was feeling similarly nostalgic, yet sadness settled on her face. "I wonder how Anya's doing."

"I'm sure she's well," Lev replied, hoping he was right.

Anya now worked at a medical research facility in the UZSR. At one point, she'd sent a yearly letter to update them on her circumstances, but they'd received no such letter this year or last. Lev suspected that might be due to *Howling at the Moon*. Although Anya wasn't connected directly to the book, she had been linked to the space program. Perhaps she'd even obtained a copy and helped share or republish it. At any rate, the Delivery Crew certainly would've interrogated her, and there was every chance they forbade her to send further letters. It was also possible Anya stopped writing of her own accord. Any number of things could've happened. Wondering about her well-being reminded Lev that the exposé had hurt many people—such as Korovin's daughter Xenia, whose record collection was destroyed.

We went for broke to come this far. We have to pull off a lunar landing.

Although Lev believed in his dream, part of him couldn't help worrying that he might've pushed it onto others. He wondered what Irina thought. Her circumstances had been entirely different when she announced her goal to the world. Maybe she was fed up with thinking back to her feelings as a seventeen-year-old.

Irina stared at the sea as dusk fell. Sorrow lingered in her gaze as she turned and looked straight at Lev, startling him for a moment. "Look at that sign," she told him. "It says 'The Road to Space!"

The sign pointed the way to the Rocket Launch Center, a holy ground in the history of space development. The fact that the UK considered it worth

commemorating contrasted sharply with the UZSR, which completely hid similar sites.

The bus stopped at a traffic light, and Lev noticed a sign in front of a souvenir shop: "GO PROJECT SOYUZ!" The shop was lined with a range of merchandise, including model rockets and spacecraft as well as Zirnitran flags. There were even *Earthrise* posters—probably unauthorized—and postcards of Lev and Irina.

A family of tourists stood in front of the shop. They looked at the bus, realized there were astronauts aboard, and immediately jumped and waved. Nathan and Aaron waved back, drawing other tourists' attention. A crowd began to form.

Lev watched in a daze, then realized people were waving at him, too. Some waved at Irina. As they waved back, Stepan and Semyon joined them at the window. The spontaneous meet-and-greet warmed Lev's heart.

The traffic light changed, and the bus continued along the "road to space."

He carried a host of mixed emotions, but for the moment, Lev felt resolved. *I chose this path. Now all I have to do is walk it.*

Two months had passed since the cosmonauts arrived in the UK. As the second half of May rolled around, the sun only got stronger. Irina moaned that she was melting in the heat. Nevertheless, things were coming along well.

Studying and learning skills in a completely different country was tough going, and training took a toll on the team's mental and physical strength. Still, the seven cosmonauts gave their all every day, sensing that they were on track.

When Lev called Lt. Gen. Viktor to update the UZSR on their training, Viktor provided news about spacecraft development and Mission 2's progress, sparking Lev's excitement.

After it occurred to Lev that the nations had essentially combined forces to build a bridge to the moon, he decided to make a point of talking to the Arnackians—not in a formal capacity as the final mission's captain but rather as a fellow person. He wanted conversation to be casual and easy, and he was simply interested in the Arnackian space program.

"Is it true ANSA poured huge sums of money into developing a ballpoint pen that works in zero gravity?" Lev asked a ground control crew member.

The man seemed surprised. "That rumor really made it all the way to Zirnitra?"

"We hear all about the UK back home."

"Hate to break it to you, but we didn't develop it. The pen was sold to us. On that note, is the story about cosmonauts still using pencils in space a lie too?"

"It's true."

"Whoa! Wait a sec, wouldn't breaking a pencil lead endanger your whole mission?"

Many Arnackians were curious about the workings of Lev's home country, and people automatically clustered around when Zirnitra came up in conversation. Lev tried not to worry about whether participating in such discussions qualified as divulging state secrets. Fortunately, the Delivery Crew agents never stopped him. Perhaps they'd loosened up on what was "classified," having seen how much information on the space program the UK publicized.

Before long, Semyon was subjecting his crewmate Aaron to Zirnitran humor. "In which month do Zirnitrans consume the least zhizni?"

"August," Aaron guessed. "You prefer drinking when it's cold, right?"

"February. It's got the fewest days!"

Aaron could do little more than chuckle wryly.

The air between the teams had been tense and prickly at first, but relations improved as the weeks passed. There were countless astronauts and ground control crew members. Some would always look askance at the Zirnitrans or ignore them entirely. Most, however, were open to friendship.

From the astronauts' point of view, Lev and the cosmonauts were organized, self-disciplined, and unusually Spartan. They perplexed Nathan so much that he once asked, "Are all Zirnitrans earnest and hardworking?"

To the cosmonauts, the astronauts' lifestyles were just as surprising. The UK allowed them to eat and drink what they liked and do whatever they wanted

outside work hours. Many were friends with the rich and famous, and to Lev's disbelief, one astronaut took part in twenty-four-hour endurance races on days off. Lev was told it had taken some negotiating with the top brass, but they'd permitted the astronaut to race so long as he wasn't crewing an upcoming spaceflight.

The cosmonauts somewhat envied the independence and extravagance the UK afforded its astronauts. Lev had never really yearned for such luxuries, though, and not all the astronauts indulged themselves. Aaron's life was orderly and buttoned-down, and Lev got the impression that Nathan was likewise self-disciplined.

There were some things the cosmonauts and astronauts couldn't fully understand about each other, but Lev was relieved that they'd at least formed a single team focused on a shared goal.

Irina alone kept her distance. She seemed uninterested in fitting in, training alongside Odette for the most part and working with humans only when necessary. That wasn't a terrible thing so long as she built trust in her backup and crewmates.

What bothered Lev was that Irina had put up a wall—not just with those around her but with *him* as well. Perhaps "wall" wasn't the best description; he felt that an opaque veil had enveloped the girl and her heart. It was thin and delicate, like a fleeting mist. Yet Lev imagined that if he tried removing the veil, it and Irina would fall to pieces and vanish into the air.

He could still engage her in conversation, and she was always happy to join him for dinner in the cafeteria. Still, she'd changed ever so slightly—a difference so subtle that perhaps nobody else noticed it.

Maybe Irina was wary of looking too much like a couple to their Arnackian cohorts. Lev also wanted to avoid creating the impression that the final mission's captain and pilot were mixing their professional duties with their personal lives. At the same time, Lev felt she was hiding much deeper feelings beyond concern for prying eyes. There was more to it. He couldn't ask outright, so he was left with no choice but to probe a little.

One night after training, as they retired to their houses, Lev tried broaching

the topic of Irina's recent aloofness. "How's everything going?"

She stared blankly at him. "Why the sudden concern?"

Lev knew the question had come out of the blue. He'd never been good at asking about these sorts of things. "Well, it's hot, and...uh, I wondered if you were all right."

"It is hot, but I'm used to it. Midsummer will be tough. I hear it's cooler at the Aeronautical Research Center, though. Odette says it even snows there in the winter."

Irina was apparently confident about her training, and nothing else seemed out of the ordinary. Lev didn't feel he could ask whether she was worried or hiding anything; if he pushed her, she'd only brush him off. He decided to leave her alone.

He was about to say good night when Irina spoke. "Hey, Lev."

"Hm?"

She put her hand to the lunny kamen around her neck, deep in thought. "It seems like you'll end up taking this, hm? Do you remember our promise?"

"Of course."

Right before Irina's historic first flight into space, Lev had rushed to the Albinar Cosmodrome to see her, and she'd said it: "Someday, when it's your turn to fly...bring it with you."

"I don't have to, because you can take it yourself when you go to the moon," Lev had replied. But Irina was piloting the CSM; she wouldn't descend to the lunar surface.

Looking dejected, she closed her hand around the blue stone. "When the time comes, I'll entrust it to you."

"If that's what you want, just say the word."

"Thanks. We still don't know if that time will even arrive."

The future was uncertain, but each mission was moving ahead, bringing them closer to their final goal of a crewed lunar landing. So long as the cosmonauts

trained in the UK, Lev could ask about development at ANSA at any time, on top of receiving Lt. Gen. Viktor's updates. The last he'd heard, both sides had approved new docking machinery designs and production had begun. Viktor had been impressed; he credited Project Soyuz's efficiency largely to ANSA's organizational power.

Although Zirnitran space development had once verged on destruction, it had since trimmed the fat and rebuilt itself. "If only these structures were in place while Korovin was in charge," Volkov himself had reportedly said, teary-eyed.

But regret wouldn't turn back the clock. Their remaining funds were decreasing, and their deadline—the end of the 1960s—was fast approaching.

Their cohorts Bart and Kaye were in the UZSR, attending joint development meetings. People were even calling Kaye the "Sorceress of the West." The computer they'd been developing—the HGC—would be key to Project Soyuz's success as of Mission 3.

People in both countries were hard at work making the uncertain future a certainty, and Lev believed that their time would come. He looked at the evening sky to the west. When he spoke next, it was in the hopes that his voice and feelings would reach his homeland, where the sun would be rising soon.

"The lunar landing will take place," he said. "I'm sure of it."

Irina looked up at the same sky. "You're right. We just have to trust everyone."

The cosmonauts and astronauts would put their faith in the engineers, and the engineers would return it. If either side wavered, Project Soyuz would fail.

In the future, past the many mornings and evenings to come, the glory of victory awaited.

Interlude 2

JUNE OF 1968 was three months before the planned Mission 2 launch, which would determine the future of space development. If the second mission succeeded, Project Soyuz would continue on to Mission 3. If it failed, the project would officially end.

Mission 2's goal was to confirm that the two nations' spacecraft could rendezvous and dock. A hangar was constructed in the Zirnitran plains as a test site. The team there suspended a Rodina and replica target drone in the air, maneuvering them via cranes.

Rodina was equipped with a new piece of collaboratively developed equipment: an airlock module compatible with both crafts. Engineers from each nation confirmed it was airtight and fulfilled all other requirements. The prospective Mission 2 crew practiced operating the airlock, ensuring they could move from Rodina to the target drone after docking. They repeated the exercise over and over with a failure rate of 66 percent. Even docking successfully in the hangar wouldn't guarantee success during the mission.

Two Zirnitrans and one Arnackian made up Mission 2's crew. The selected cosmonauts were freshmen with strong piloting skills. The astronaut was Steve Howard, the first man in Arnack to fly in orbit and an old hand at rendezvousing and docking.

While there was a technological test at the core of Mission 2, it was also a chance to promote international cooperation. This would be the first time two nations' crafts docked in space. To boost excitement around that achievement, ANSA's Office of Public Information loaded the UK's target drone with souvenirs for the crew to retrieve. It wasn't merely a publicity stunt—it was also done in anticipation of the next mission, since Mission 3's crew would collect film containing photographs of the lunar surface.

The question of how far to take PR led to disagreements the nations couldn't easily settle. While the UZSR considered space development classified, the UK wanted to publicize the entire mission to garner citizens' support. Their two

approaches couldn't have been further apart.

The UK requested a live broadcast of Mission 2's launch from the Albinar Cosmodrome, including shots of the spacecraft interior. The UZSR refused, stating, "The Cosmodrome and Rodina are classified. Film your drone launch." They would have to reach a compromise quickly. Deadlocking might not impact Mission 2's success, but it would likely have a knock-on effect on future missions.

Even candidate promotion to "cosmonaut" or "astronaut" was subject to debate. In the UZSR, cosmonaut candidates who hadn't visited space were technically "pilots," whereas the UK classed anyone who passed its screening process as an "astronaut." To avoid confusion, the two nations needed a mutual standard.

Eventually, they agreed to consider all Project Soyuz crew members cosmonauts and astronauts. Several did have spaceflight experience, and the UK didn't want them to outrank those without, like Nathan Louis.

Mission 2 progressed steadily toward its launch date, and swift preparations were already underway for Mission 3 and beyond...

Chapter 4: The Sorceress of the West

Blue Eyes

JULY IN NORTHEASTERN ARNACK was less humid than in the south, making it more comfortable. In the historic city of Grambridge—where vampires were said to have arrived after fleeing the old continent in the seventeenth century—Bart and Kaye were hard at work at the Institute of Technology.

The worries and uncertainties that initially surrounded the joint meetings with the Zirnitrans had proven unfounded. An occasional heated debate had left a disquieted air in the conference room, but once the attendees realized the clashes showed that both sides were serious about accomplishing the goal they'd set, they quickly established a rapport.

It was true that the UZSR's on-site personnel never said more than absolutely necessary. The Arnackians had to wonder whether their counterparts had received orders to keep exchanges to a minimum. Regardless, the Zirnitrans' spirits burned with a fiery passion.

As Project Soyuz continued, it became apparent that revision requests generally took a while to process. The UZSR was highly secretive, so documents moved slowly. Furthermore, changes tended to require permission from higherups. Those authorities were often former members of the Party for Future Technological Development, and just looking at documents full of technical computer terms pained them, but they insisted on at least reviewing revisions.

The Arnackians accepted that, understanding it to be part of Zirnitran culture. In spite of these bumps in the road, joint meetings continued via telephone and telex, and ANSA held internal development discussions twice weekly. The teams finished revising operational plans for Mission 3 by mid-June, but their work was far from over. In fact, at that point, Bart and Kaye rolled up their sleeves. The programs for Mission 3 had been in engineers' hands, but Bart, Kaye, and

their software development team were creating Missions 4 and 5's operational plans.

There wasn't even time to rest. Kaye consumed exorbitant quantities of coffee and sugar cubes, and Bart worried constantly that she might break down. They were so busy that when they received other facilities' training reports, they stacked sections irrelevant to their tasks in a corner. Bart occasionally took it upon himself to organize the documents after finishing work for the day. If the stack got too high, the reports might tumble like an avalanche.

As Kaye worked overtime one night, he did exactly that—tidied the miscellaneous paperwork threatening to topple over.

Kaye was scrutinizing a document with a troubled look, arms crossed. It was a binational engineering report that addressed a key issue with installing the HGC aboard Rodina—namely, the computer's compatibility with the spacecraft's control systems.

The report's contents posed a problem. Rodina could accommodate the HGC's size and voltage, but the Zirnitran hardware itself was very different from Arnack's. Connecting and controlling everything using the HGC was challenging both the budget and schedule.

Until now, the Black Dragon had handled lunar orbital flight operations as well as Earth orbit rendezvous and docking procedures. But certain final mission tasks—like rendezvousing and docking in lunar orbit, guiding the lunar landing, and returning a craft to lunar orbit and Earth—were beyond that computer.

Forcing Rodina's crew to cover what the HGC couldn't would dramatically reduce their chance of success. Bart and Kaye's only option was to fit the HGC into the current flight plans.

Kaye had come up with a strategy to deal with the problem. "There's no other way," she muttered. She turned to Bart, her expression resolved. "All we have left is our last resort. That's it."

Her statement took Bart by surprise. "Is it really possible?"

"Theoretically, yes. I want to run a test, though. Will you help me?"

"Of course. But it'll come down to what the Zirnitrans think of the idea."

"If they oppose it, we just need to convince them. I'll use my *magic*," Kaye said with a cheeky grin. "Like I did playing chess."

When the Arnackians visited Zirnitra for the previous month's joint meeting, the nations had held several friendly exhibition chess matches to deepen their bonds. Kaye had destroyed the Zirnitran team single-handedly, saying she could "read their moves." Her chess abilities became a hot topic. One Zirnitran after another queued to checkmate her, but in the end, she won fifty games in a row.

Kaye's combined chess skills and computing expertise left the awestruck Zirnitrans calling her the "Sorceress of the West"—a term of endearment that echoed the nickname of the UZSR's chief designer, the "Sorcerer of the East." The moniker embarrassed the dhampir girl, but she left Zirnitra with a smile on her face.

It'd be no exaggeration to call Kaye's proposed "last resort" magical. It was the kind of stunt Bart never would've dreamed of, so all he could do was follow her instructions.

As Kaye dropped into silence once more, pondering her "last resort," Bart returned to organizing reports they'd received. He flipped through one from the Manned Spacecraft Center.

"Hm?" His heart stopped as he caught sight of the heading "HGC SYSTEM CRASH IN CSM MISSION SIMULATOR."

"Wh-what the—?!" Sweat beaded on his back. A crash was incredibly serious. Why was this in the "miscellaneous reports" stack?!

Kaye turned at his exclamation. "What is it?"

"This is bad." Bart showed her the report. "It looks like there was a system crash."

"Huh?!" Kaye's eyes nearly popped out.

The two hurriedly skimmed the report, which described a "fire" during pilot Irina Luminesk's first simulator flight.

Bart couldn't help chuckling. "Didn't expect to see her name in here."

"Seems like they were thrown in at the deep end," muttered Kaye.

Further down, the report explained what had produced the system crash. "Although the spacecraft was in midflight, distressed pilot Irina Luminesk ran program P01 after the fire's outbreak, causing an impossible error! No mechanical damage resulted from the system crash; it merely erased precrash flight data."

Relief rushed through Bart as he read the details. The issue at least wasn't major. "Well, it makes sense that the system crashed. She reset it during flight. One minute they were traveling through space. The next, the HGC thought they were on Earth. Of course it went haywire."

Irina had essentially pulled a prank on the computer, which hadn't doubted her in the slightest. It did exactly as it was told, hence the crash.

"I can just imagine how much that 'fire' flustered Irina," Kaye said, giggling. "Maybe she's a little scatterbrained sometimes. Still, it's kind of cute that the computer was that inflexible."

The fact that the training supervisor had gone as far as putting an exclamation mark after "an impossible error" showed how ridiculous he'd found the crash. That probably explained why he hadn't flagged it as a serious incident.

"At least it was a simple mistake," said Bart. "Just Irina kicking up a fuss." Yet something tugged his mind and refused to let go. *An impossible error? Wait a sec. "Impossible"? But it happened. And if the crew made the same mistake on a mission...* A chill went down his spine. "Kaye!"

"Bart!" she cried simultaneously, her face pale. She was thinking exactly the same thing.

Bart flipped through the report again. "What do we do? This is a major bug!"

A well-trained astronaut would never ordinarily make a mistake like Irina's. Even so, astronauts *would* be giving the computer orders. If one ran the P01 program accidentally, they'd reset the flight data prior to that point. The HGC would be unable to plot a route back to Earth, which would strand the craft in space. A few keystrokes were all it took to cause the life-threatening malfunction.

Kaye sank back into her chair and shut her eyes. "Give me a sec to think," she

muttered. Her brain was running through countless possibilities and branching scenarios, as it did when she considered potential chess moves. Not wanting to distract her, Bart held his breath and waited.

After five minutes, Kaye's eyed opened. "Okay."

"Can we fix it?" Bart asked hesitantly.

She nodded, cheerful. "We'll just need to prevent the bug by adding error correction and recovery functions to the software."

Bart didn't grasp Kaye's meaning immediately; he'd never heard of those functions. "Could you explain that to me? Sorry."

"Well, if someone tries running P01 midflight, the HGC will detect that it's an error and warn them. Then the recovery function will let the user return things to normal."

"The computer will defy our orders?" Bart pictured a robot rebellion.

"No, not as such. You're thinking that computers should follow human orders mechanically. I thought the same, but thanks to Irina's bug, I realized they can't just do that. If we issue impossible orders, they have to react!"

The space program was the first real test of computers, and engineers were honing and fine-tuning the technology as space projects proceeded. Luckily, Bart and Kaye had found this problem early. Surely other undetected bugs and glitches lurked in the code, and finding and fixing those would be up to the duo as well.

Kaye jumped to her feet. "Let's reprogram the software right away! I don't think we'll see anything like a P01 mistake with Aaron as captain, but the less we have to worry about, the better."

Hearing his brother's name startled Bart. "Wait, you want to fix this in time for Mission 3?!"

"Of course."

"No chance. We're well past the review deadline!"

Joint discussions of Mission 3's software had concluded, ANSA's project coordinator had reviewed the operational plans, and the teams had finalized

their revisions. They were already creating the necessary programs, and revision regulations meant additions were impossible.

As that dawned on Kaye, she cried out in dismay. "Oh no!"

"The best we can shoot for is fixing this on Mission 4, so—"

Kaye cut him off. "We have to take this directly to the professor!"

"What?!"

Picking up the phone, she dialed the professor supervising their division. "Please, we really need to talk with you!" The man was reluctant, but she strong-armed her way through. "We'll be there right away! Come on, Bart. Let's go!"

"H-hey! No need to pull me!"

They hurried to the professor's office, report in hand. He'd been just about to head home, so he was far from pleased to have them there. "As I'm sure you're aware, the deadline's passed."

"This would be an emergency measure to prevent errors and accidents," she pleaded, insistent. "Can't we do *something*?"

He wouldn't hear of it. "That's unnecessary. Astronauts generally work under stress, and all they have to do to control the HGC is check the guide board and press the right keys. The notion that they'd make a mistake midflight and erase all their data is unfathomable. You can't lump them in with someone hopping into the simulator for the very first time. Now go home."

Kaye wasn't about to relent either. "Maybe we can't. Still, the input error risk percentage isn't zero, and that makes it one hundred! We *know* humans make mistakes. We developed ANSA's computers on that premise!"

The professor scratched his head, unsure how to respond. "I know what you're saying. In all honesty, now that you suggest error correction functionality, it does make sense to me."

"Let's add it, then!"

He didn't budge. "How many times do I have to tell you? The deadline passed. Add those features to Mission 4's operational plans, if you like. Mission 3 has to

move forward as is."

As Bart stood to one side, listening to the argument, he tried to think of a way to get through to the professor. The man had admitted that Kaye's suggestions would benefit the HGC. What stopped him from okaying them was the negligible risk—not to mention the hard fact that having the Zirnitrans approve post-deadline implementation would be time-consuming and troublesome.

Bart faced the professor. "My brother Aaron is Mission 3's captain."

"I'm well aware of that, Bart. That's exactly why I can rest easy. There's no risk of a careless error under his command."

"I've heard all about spaceflight from Aaron. Its conditions are the definition of extreme—much more severe and unforgiving than Earth's. He's always managing his nerves."

"That means he won't err."

Bart shook his head. "The flight will take eight days total from launch to return. Could you maintain full concentration in a cramped, suffocating spaceship for over *two hundred* hours? What if spacesickness jumbled your senses? Aaron may look perfect, but even he's spilled a cup of coffee. I've seen him trip over his own feet walking upstairs!" The longer he talked about his brother, the more his worry swelled. He had to convince the professor.

The other man crossed his arms, heaved a sigh, and fell silent.

Bart ducked his head apologetically. "This was my mistake. I should've noticed the bug sooner. I figured that kind of thing was impossible. You're right—the risk of a mistake is incredibly low. But that doesn't mean there's *no* risk. if the worst happened, and we lost a life I knew we could've saved, I couldn't call myself an engineer any longer."

Kaye likewise lowered her head regretfully. "Astronauts risk their lives flying in our stead. It's our duty to provide them safety and security."

Putting a hand to his chin, the professor let out a long, heavy groan. When he spoke next, there was real determination in his voice. "All right. Let's find a way to make this happen."

Bart and Kaye raised their heads, expressing their gratitude in tandem. "Thank you!"

"You will be attending a joint meeting in two weeks, won't you? If we're to stand any chance whatsoever, you'll need to prepare a clear outline and instruction manual for these improvements."

"I'll get that done!" Kaye cried enthusiastically.

The professor nodded his approval. "All right. While you two are gone, we'll prepare the program." He turned to Bart. "You'll need to coordinate the team."

"Got it!"

Despite Bart and Kaye's energy, the professor breathed a fretful sigh. "How will we propose this to the UZSR? And how will they respond if we try to change what's already settled? We don't know anything about Zirnitra's inner workings. I can't imagine it'll be simple."

The thought deflated Bart. Preparing the proposal for the next joint meeting would impact their schedule. Even if they convinced Director Volkov over the telephone, he'd need the higher-ups' permission. That would require Bart and Kaye to send documents for review, which would take at least a week. The fact that the nations had teamed up for Project Soyuz didn't mean everything would go smoothly.

Bart wondered whether they'd be able to exploit some kind of loophole. Once Volkov signed off, could they plot with him to sneak Kaye's improvements into the project plans? Could they simply take a page out of the UZSR's book?

A mischievous thought flitted through his mind. "Aha!" Although it'd be underhanded, Bart felt compelled to run the tactic past Kaye and the professor. "What if we were *more* secretive than the Zirnitrans and *hid* the computer's new functions?"

Kaye let out a short gasp.

The professor frowned. "Is that possible?"

Bart thought for a moment. "Nobody on their team understands the HGC's unique assembly language. That's why they left software development entirely

to us. I think we can update the program discreetly. It isn't like it'd be malicious, and the computer would only run those functions in the event of a mistake."

"Thoughts, Kaye?"

Kaye's heart was likely as conflicted as her expression. "It doesn't feel great, but I'm on board."

"Hmm... The ends justify the means?" the professor muttered, then nodded. "In that case, we'll run with Bart's idea and install the program before Mission 3. As far as operation plans are concerned, we'll implement it *officially* on Mission 4."

Leaving the professor's office with Kaye in tow, Bart felt a seed of guilt sprout within him. He crushed it immediately. Outside the building, Kaye heaved a huge sigh of relief. She clasped his hand, joy lighting up her face. "Thank you, Bart! I must admit, you caught me off guard suggesting we fix the program on the sly."

"I just know we have to get rid of the bug, no matter what it takes. And we'll never do it in time if we don't hurry. We've still got joint meeting documentation to prepare too."

"Looks like we'll spend more than a few nights here over the next two weeks."

Wondering how long it'd been since he had such a tight deadline, Bart thought back to his role in D Room. "This reminds me of when Division Chief Damon left us burning the candle at both ends the night of the hurricane."

Kaye looked at Bart with deep emotion. "I can't tell you how much you saved me that night."

"Back then, all I knew how to do was carry punch cards and keep your energy up with regular sugar deliveries."

"Still, I'm grateful you were there."

Her words made Bart bashful, and he turned away. "Thanks. I, uh...I should drop by my apartment. We have to get ready if we're going to pull all-nighters again." He started walking.

Kaye still hadn't moved. "Um, Bart...?"

"Sometimes I wonder—what if you never came to D Room? What would've happened to us?"

"What do you mean?"

"Hm?"

"Well, D Room would've been full of ACE employees. Mia and the others wouldn't have had anywhere to go. Me... I never would've worked on the HGC or gone to the UZSR. I'd probably be in the Moonlight District now, growing queen of the night flowers."

What if I'd never met Kaye? Sometimes Bart thought about it too. "I never would've touched a computer or worked in PR. Once I got sick of always being seen as an astronaut's little brother, I'd have quit ANSA. I would just have been a guy staring up at the moon through his home telescope."

Kaye walked slowly beside Bart. "In a future where we never met, the UZSR— or maybe the UK—might've reached the moon on its own. But perhaps they both would've failed," she mused. "History is written with each step we take. Right now, we're making history. If we keep walking this path, then in the future that awaits, both nations will reach the moon together."

She and Bart looked ahead. Streetlamps lit the dark path before them. At the end of that path was a sky full of stars.

Kaye did a double fist pump. "We've got to give this our best!"

Bart clenched his own fists and bumped them into hers. "We'll give it everything we've got, right up till the final mission."

"Mm-hmm! And even after that!"

Kaye's silver hair fluttered in the gentle evening breeze, revealing her pointed ears. Her exclamation echoed in Bart's mind, along with a few words she hadn't spoken.

In the future that awaits, both nations—and both humans and Nosferatu—will reach the moon together.

Bart and Kaye were set to leave for another joint meeting in the UZSR. Both were utterly exhausted. Two weeks had passed since they went to the professor about the bug, and they'd worked day and night without rest, completing the documents necessary to implement HGC error correction prior to Mission 3. Then, delegating the programming to the professor and his lab staff, they'd hurried to join the team heading for Zirnitra.

Along with the error correction program, they were prepared to address another issue: the HGC's compatibility with Rodina's control systems. The UZSR lacked the materials to demonstrate Kaye's "last resort," so the Arnackians brought a reel of 16mm film showing the process in an ANSA facility.

Filming the demonstration had wiped Kaye out physically and mentally. As they boarded their plane, she said, "I'm falling asleep as soon as we take off."

Sure enough, she conked out so quickly it was like someone had flipped her power switch. She used Bart's shoulder as a pillow, which embarrassed him a little with the rest of the team so close by. Still, he knew better than anyone how much sleep she'd lost over the last two weeks, and he couldn't bear to wake her.

Bart also wanted nothing more than to drift off, but he was leery of the awkwardness of waking after napping on each other. Perhaps he was *too* worried, but that was typical of him.

With Kaye's weight against his shoulder, he gave up on sleep and leafed through their meeting documents. Unfortunately, he couldn't concentrate; Kaye's sweet scent tickled his mind and body. He didn't know whether it was her shampoo or her perfume. Either way, he couldn't think straight.

Having the team's eyes on him only made him more flustered. When Division Chief Damon passed by, he flashed Bart a grin that oozed with hidden meaning. *Aw, man.* Mortified as Bart was, he covered Kaye with a blanket and continued reviewing their plans to prep for the upcoming meeting.

Project Soyuz was proceeding at a rapid pace. The joint meetings created three key documents for each mission: a design proposal covering necessary hardware, an organizational plan on flight details, and a project road map outlining the required progress in relevant areas. Personnel split into five

specialized groups according to those documents, and the groups subdivided to work on specific tasks. Despite the splits, everyone moved as a single organization in pursuit of a shared goal.

That approach to project management was unique to ANSA. The Zirnitrans were initially hesitant about it, but happy to implement it once they understood its efficiency. The UK's speed generally surprised them, which made Bart wonder just how *their* space program was structured. There was no way of knowing, though, and he was too scared to ask.

The two nations had established a firm partnership, completing compatible hardware and retooling key machinery. Everything was on schedule, and Mission 2—the UK and USZR's first collaborative effort—was coming together. It would launch in just two and a half months; Bart found the thought woke him up. Both mission control centers would work together from launch till return, so crew members and ground control officers were already participating in joint simulations. The nations had also produced procedural manuals and action plans to ensure they were aligned. As of Mission 3, Bart and Kaye's own computing division would participate fully.

Everything was going according to plan. All that was left was for the UZSR to accept Kaye's "last resort." This trip's goal was to discuss her proposal with the Zirnitrans and ultimately earn their agreement. Failing to do so would require Arnack to work out another method.

Bart was sure the UZSR would agree. When the Arnackians filmed Kaye's demonstration, her abilities astounded the supervising engineers so much that they applauded. The Zirnitran engineering team was sure to believe in the magic she wielded, so long as the trust they'd built with the Arnackians held strong.

More than anything, Bart loved the smile on Kaye's face when, after battling trial and error, she accomplished what she'd set out to do.

The bus carrying the UK team drove through the city streets out of Sangrad. Hydrangeas swayed by the roadside as they headed for Kosmos, a Space Research City surrounded by forests.

Bart had been here enough times to get used to the UZSR. Arnackian engineers who hadn't yet visited were often nervous about the trip, but Bart and the others put them at ease by describing their own experiences. With its armed guards and metal fences, Kosmos initially seemed like a prison. Now it felt more like an isolated sanctuary. The city could still be suffocating at times, but Delivery Crew agents only ever observed the Arnackians; they never interacted with them directly. Additionally, the heavy security around the team at least meant no anti-Arnackian partisan would attack them.

The bus arrived at the usual hotel, and the UK team alighted into the fresh forest air. Even in July, Kosmos was cool and refreshing. The apartments developed specifically for Arnackian engineers had been finished. Their guide also informed them that the Zirnitran authorities had invested in improved domestic computing equipment and facilities, now seeing the benefit to the nation's future.

The incredible speed with which the UZSR enacted those plans surprised Bart, since they seemed to approve documents for Project Soyuz at a glacial pace. The investments had been ordered from the very top, though. The country's dictatorial structure gave Bart the sense that a single misstep could be disastrous; he couldn't help suspecting that such a snap decision had caused Mikhail's tragedy.

The UK team had no time to rest. They boarded another bus—complete with the usual cardboard-covered windows—and headed for the conference room where the joint meeting would take place. Director Volkov's team welcomed them back, but the meeting began without anything in the way of small talk.

First on the agenda was Mission 2's status. Preparations were going smoothly, and the mission was heading toward its original scheduled launch date. That news reassured the whole room, and they quickly moved on to Mission 3. Bart contributed to the discussion while praying no one would bring up their secretly implemented updates.

Before long, Volkov asked about the HGC's compatibility with Rodina's control systems. "We raised concerns regarding this. What were your findings?"

"Unfortunately, total control via the HGC will be difficult," Bart replied,

referring to ANSA's analysis. "Some datasets and signaling systems aren't compatible. We could rebuild the equipment to solve that, but it'd delay the mission and incur further expenses."

"That's not feasible. It would halt the project completely. Do we have any other options?"

"Our team did develop one, but it bears mentioning that it's our last resort."

Bart looked at Kaye, and the two handed out documents to the Zirnitrans. They'd decided to distribute this information *while* proposing the last resort; if the Zirnitrans had received the handouts early, they'd have erupted with questions. Even Division Chief Damon hadn't understood completely when they brought him the idea, reacting with some skepticism. As they'd expected, the Zirnitrans also murmured and cocked their heads, wearing puzzled expressions.

As they did so, Volkov posed a question. "Kaye Scarlet will control equipment incompatible with the HGC as a fourth designated crew member.' What does that sentence mean? Rodina is a three-person craft."

All eyes were on Kaye as she explained, "Five ACE Alpha general-purpose computers at mission control will correspond with Rodina during flight. They'll monitor its speed and orbit in real time, and I'll use that data to jury-rig compatibility between Rodina and the HGC. I'll interpret between the machines."

"What?! Is such a thing even possible?" The question came from the Black Dragon's developer, who clearly couldn't believe what he'd heard.

Bart nodded confidently. "That approach to the technology isn't intended, but it is possible. The facility where we developed the HGC calls that sort of alternate use a 'hack.'"

"'Hack'? I've never heard of that."

"In concrete terms, the mission control computers' outputs will form the basis of inputs to Rodina's control systems," Kaye explained. "We'll send signals and run programs to operate the systems as needed. Basically, we'll patch into how configurable logic controllers direct hardwired logic in analog spacecraft computers—well, that's my guess anyway. Is it correct?"

She left the Black Dragon's lead developer momentarily blinking in shock. "Er, yes... That's correct. But, uh, are you saying the fourth crew member will operate the equipment from Earth?"

"Yes, but I can't carry out this hack on my own. I'll need the help of everyone at mission control. We'll soon need to single out the concerned equipment and determine the procedures in more detail."

Kaye said all this calmly, but the Zirnitrans were growing rowdy. The lead developer still looked as though he couldn't wrap his head around what he'd heard. "This is all very easy to say, but in practice, you can't possibly—"

"We verified the hack." Bart cut the man off, revealing their 16mm film reel. "The necessary computers aren't available here, and we doubted we could access other resources to test it easily, so we filmed Kaye operating equipment this way in advance. The demonstration took place on Earth, not in space. Can we screen this for you somewhere nearby?"

The sudden request briefly flustered the Zirnitran engineers, but Director Volkov reacted with a single comment: "For the moment, let's watch your film."

The teams headed to the cramped projection room; everyone squeezed in, intent on the film that began playing before them. The screen at the front of the darkened chamber showed the ANSA control center's computer room. Kaye stood in front of the ACE Alpha computer's huge operator console. It was one meter tall, two meters wide, and divided into sixteen panels full of countless switches, knobs, and meters. Various lights flashed red, white, and orange, with information displays from the various registers.

The ACE Alpha was the kind of equipment the UZSR engineers wanted more than anything else in the world. They let out long, awed sighs, their eyes brimming with envy at the sight on-screen.

Kaye checked some data, then quickly input it into the system. Her movements were mechanical, without a hint of wasted motion, and she stopped only to give the operators around her precise instructions. ANSA hadn't recorded audio for the film, so the viewers couldn't hear her. However, Kaye herself now spoke over the footage, explaining the contents of the handout she and Bart had provided earlier. The Zirnitrans murmured to themselves, their

eyes flashing from the screen to the papers they held.

The screen now showed the site of Hyperion as Kaye operated its control systems remotely. Switches flipped and lights flashed, but since the footage didn't depict actual spaceflight, it wasn't particularly convincing. The demonstration film was all Bart and Kaye could muster in their limited time, though; they'd spent the lead-up to the meeting preparing the error correction program.

Before shooting the film, Bart hadn't been sure of its persuasive power. Yet as he watched Kaye on-screen, working her magic on an incomprehensible machine, the dark projection room around her seemed to become the very depths of space, and Hyperion appeared to float within it on its way to the moon. It was as if Kaye's mental picture flowed from the film, making its way to those watching.

Once the screening ended and they turned the lights on, Bart felt himself return to reality. The Zirnitran engineers were more talkative now, chatting among themselves with concerned expressions. As Bart had expected, the film alone hadn't convinced them.

"Now I understand the 'hack' you described, as well as what you meant by a fourth crew member," Volkov told Kaye, rubbing his chin. "I must ask: What would happen if you made an error during the actual spaceflight?"

"I'd fix it immediately," Kaye replied without hesitation.

"Regardless, what would it mean for the spacecraft? We have no means to determine whether we could guide it to success."

Many of the Zirnitrans seemed to share that opinion, but Kaye didn't flinch from it, and didn't drop her gaze from Volkov's. "All I can ask is that you believe in me."

"Despite that..."

"The hack's the last resort," Bart reminded him. "Kaye would act on behalf of us all, and our engineers and ground control officers would help her support and guide the spacecraft from Earth."

Damon and the rest of the UK team stared at their counterparts, their eyes

clearly pleading.

"I'll train with everything I have to ensure there are no errors midflight." Kaye was practically begging as well.

Volkov responded with a cold, distant nod. "I understand your stance. But trusting you with this would mean putting our cosmonauts' lives—and the very fate of Project Soyuz—in your hands."

Kaye's gaze didn't waver. "That's no different from when you entrusted Lev and Irina with piloting their spacecraft, is it?"

"It is."

"In what respect?" Kaye wasn't attacking the director, just asking for an explanation. "My being Arnackian?"

"I said nothing of that sort," Volkov replied with a hint of disdain. "You're the focal point of the computing division. I understand full well how accomplished you are, but we're discussing flight through the depths of space. I've never heard anyone suggest controlling spaceflight from Earth."

Kaye nodded thoughtfully. "Of course you haven't. It's unprecedented. That said, it shouldn't come as a surprise. Everyone here aims to achieve something that's never been done in all of history."

Volkov was speechless. The expressions of the Zirnitran engineers around him seemed to lighten.

"The UZSR has achieved the unprecedented on many, many occasions," Kaye went on calmly and clearly. "You launched a satellite into space. You completed the first spaceflight and spacewalk. Your successes surprised the whole world. I was also amazed—so much so that I wanted to reach the same heights your engineers had. None of your identities were publicized, so I could only guess what kind of people you were or who the mysterious chief designer was."

Volkov lowered his gaze, brow furrowing as he fell into thought.

"Not once, in any mission, have we ever been assured success," Kaye continued passionately. "Didn't Zirnitra's tragedies stem from launches your team didn't want? Even in Arnack, we've endured misfortune because of this

competitive rivalry between our nations. Many people strongly believe we should abandon the moon. I can't deny them their opinion, but I want to fight till the end. I want to achieve a lunar landing—and I want to achieve it with those who have the same dream I do, in the spacecraft they made!"

Division Chief Damon stood. "We knew you'd probably refuse our last resort, but we suggested it anyway," he said, his tone and gestures emphatic. "We've watched Kaye for many long years, and we know this for sure: She's a one-of-a-kind prodigy. Our faith in her is absolute. If you don't agree to our proposal, I ask that you provide your own."

Faced with the resolve of the entire UK team, Volkov looked at his associates, judging each person's expression.

Bart watched in silence. Kaye can do it. Believe in her.

Finally, Volkov met Damon's gaze. "I can't answer you here and now. I ask that you give us until tomorrow to consider your proposition."

"Understood." Damon sat down.

"Thank you!" Kaye broke into a smile. "In that case, let's move to the next order of business."

Nothing was confirmed, but Bart was sure Volkov's team would approve the last resort proposal. He'd noticed the Zirnitran engineers nodding in agreement. Even the Black Dragon's lead developer and the reaction control system's design lead seemed on board.

There were no contentious topics besides the UK's "last resort," and the joint meeting closed smoothly with a progress update and schedule review. Mission 3's software wasn't mentioned, which came as a huge relief to Bart. The UZSR had left that entirely in the computing division's hands.

By the time they returned to the hotel, night had fallen. The UK team went straight to the cafeteria. Each day's menu was decided in advance, and they'd all gotten used to the traditional Zirnitran cuisine. Compared to the greasy, meat-heavy Arnackian diet, Zirnitran food was simple and full of vegetables. Bart thought he got a little healthier with each trip.

Kaye dumped tons of mustard into her chilled soup. She'd essentially created a new dish, but that was routine for her now. She had been a bit self-conscious about her eating habits when she first arrived in Zirnitra, but she didn't care as much now that they were more accustomed to the country.

The two of them carried their meals to a table, sitting across from each other to discuss the hack they'd suggested at the meeting.

"I bet Aaron will be surprised to find out you're going to control the spacecraft from Earth," said Bart. "I'm glad he at least understands computers. I shouldn't say it, but I think Steve Howard would've gone nuts over the 'last resort.'"

Kaye chuckled at the way Bart lowered his voice. "If it does get the green light, we really can't afford a single mistake. I'll have to focus for a while, so I'll need you there with me the whole time."

"I'll get sugar cubes ready—lots of them. We'll just need to watch out for hot coffee and stairs. I'll prepare ointment and bandages, and ten spare pairs of glasses so it won't matter if you bump into me and break them."

"Why does this joke sound so serious?"

"I mostly am serious. It's a miracle you haven't tripped during our visits here yet."

Kaye looked away with a huff, then spread caviar on her black bread and munched it quietly. Their casual chat had flowed so naturally, it was hard to beleve an entire mission's success rested on the dhampir's shoulders. The weight must've been immense, but Kaye didn't even hint at that.

Bart wasn't sure how much he could contribute to the magic she would weave; in fact, he worried *he'd* crumble under the pressure. Timidity was taking root in his heart.

Their late-night dinner done, Bart and Kaye returned to their separate rooms. Bart showered and was reading material for the next day's meeting when there was a knock at his door. He checked his watch—it was almost eleven-thirty. Who needed to talk with him at this hour? He wondered briefly whether Kaye had broken her shower again and needed a hand.

Hearing another knock, he called, "Just a minute!"

When he opened the door, his heart leaped into his throat. A Delivery Crew agent was on his doorstep.

"Quiet, please. I'm with the Committee for State Security. Bart Fifield, please come with me."

The moment Bart heard his own name, his blood froze in his veins. Why? What have I done? What happened? Racked with confusion, he couldn't bring himself to respond.

"Please come with me," the agent repeated slowly, voice sharp as a dagger.

Bart had no choice. "Um, okay," he muttered, his whole body trembling.

The agent didn't explain why Bart had to follow or allow him to change clothes. He simply led Bart through the hotel's back exit and had him sit in the back seat of a black car. Inside were another agent and the petrified Kaye, who was dressed in thin pajamas and a coat. The Delivery Crew had clearly taken her completely by surprise, just like Bart.

"Kaye—"

"You are not permitted to speak," said the agent with Kaye. His voice and manner were polite, yet Bart sensed he was a cold, emotionless machine.

The vehicle drove off in silence. Its window curtains were closed, and the agents didn't tell Bart or Kaye where they were going. They stopped after about ten minutes.

"Please exit the vehicle," one agent instructed.

They did as they were told, and the agents ushered them inside a frigid, lifeless concrete building. Based on the scenery he glimpsed momentarily, Bart guessed that they hadn't left Kosmos. He didn't know exactly where they were, but he suspected it was near where the joint meetings occurred.

The Delivery Crew led them down narrow corridors and deeper into the building. Another two agents joined them en route, not speaking a word. Kaye's expression was tense but blank. A leaden weight sat in Bart's stomach.

The agents brought the two engineers to a small, windowless room that held

only a steel table and chairs. Its simplicity was chilling; it reminded Bart of a police interrogation cell.

"Sit," came a woman's voice from a blind spot in the corner.

Bart practically jumped in fright, head whipping to see who'd spoken. She had blonde hair tied into a ponytail, and she held a tin of candy. Her deep-green eyes watched them carefully. Bart felt as though he'd seen her on the news a few times. Then he realized he was looking at Gergiev's secretary Lyudmila Kharlova, the woman Jennifer suspected of studying in Arnack under a fake name. What was she doing there?

He sat beside Kaye, so nervous that his heartbeat echoed in his ears. Lyudmila remained in the corner, observing them silently as a skeletal, weathered Delivery Crew agent sat in front of the pair. His eyes were sunken, but his muddy pupils held a subtle glow. Bart was immediately on his guard.

"I have an inquiry about the HGC." The agent's voice was utterly toneless. "Did you install an unauthorized program on it?"

Kaye gasped. The question was like a hammer to Bart's chest. How did they know? Was it possible there was a mole at the institute? The thought sent a cold shiver down his spine. Lyudmila herself was clear evidence that it could be true. Regret bubbled within Bart at what he'd gotten them into. He felt stupid for thinking they'd ever sneak the program past the Zirnitrans, and that they lacked the expertise to spot it.

"Did you install an unauthorized program?" the gaunt man asked again.

Silence would only bring more intense questioning. He and Kaye were suspects, that much was clear. Kaye shot him a worried glance.

What do I do? Bart's mind raced. I suggested sneaking error correction onto the HGC, so I have to tackle this. He strove to maintain his composure, inhaling deeply through his nose. The error correction program wasn't malicious, so he made a decision: He wouldn't hide it. "Yes. I'm sorry for not asking permission."

"What is the program's purpose?"

"It prevents input errors and system crashes. It's nothing to be wary of, although I understand that it looks underhanded."

The man's eyes settled on Bart as he explained the program in full. He told the agent that they'd noticed the bug too late and that the error correction program wouldn't have received approval prior to Mission 2's launch. They'd had no option but to go ahead and install it, planning to include it officially in the following mission's operational plans. Bart strove to make his explanation clear and precise, but he was so nervous and flustered that he was an incoherent mess. His palms were sticky with sweat.

However Bart defended their decision, the agent's expression never changed. "We suspect you of installing this unauthorized program as a strange...'hack,' as you call it...to steal classified information and send it to the UK."

"No, that's a huge misunderstanding! That's not what we made it for at all—it's to protect the crew's lives!"

"You can say whatever you like. We have no way to decipher the strange mess of letters making up the code."

At this rate, Bart knew he could explain all night and never get anywhere. He fell silent.

"Please analyze the program properly. It's exactly as Bart says," Kaye interjected. "It's meant to make space travel safer. We have no intention whatsoever of stealing information."

The skeletal man turned on Kaye, glaring daggers at her. "Dhampir wench," he hissed. "I understand you're central to computer development. You intend to use your indecipherable code to steal information and destroy Zirnitra. You're inhuman."

The agent didn't trust them in the slightest, and he evidently had no shred of love for the UK or dhampirs. It seemed doubtful that he wanted Zirnitran relations with Arnack to improve at all.

"Monster. What was your endgame, installing that suspicious program?"

Kaye bit her lip in frustration, hands balling into fists on her knees. The agent was throwing everything she'd worked on over all those sleepless nights back in her face. She was so much more talented and capable than Bart, yet the man was treating her as less than human. Bart's blood boiled, but what could he do?

How could he convince the agent to believe and release them?

He longed for a lifeline, but there was no one to help. The agent had dismissed all their attempts to explain themselves; he assumed they were guilty. Was this the real UZSR? Was it what Bart imagined before he'd arrived—a nation of fear that eradicated anything it deemed unnecessary?

Bart glanced at Lyudmila, guessing that she was at the center of this. She rolled a candy along her tongue. The woman was so silent it was terrifying, and his inability to read her thoughts or emotions gave him the shivers.

"Shall we arrest them, Comrade Kharlova?" the agent asked.

Arrest us?!

A tremor of fear ran through Kaye, and Bart was assailed by a wave of regret. They'd progressed so far that the Zirnitran engineers were considering Kaye's "last resort," and now he'd made her look like a spy. This was all his fault. He had been the one to suggest that they break the rules. If Kaye was arrested and removed from Project Soyuz, software development would cease, eliminating any chance of a lunar landing. The international collaboration people put so much hope in would crumble to dust, all due to Bart's stupid, careless suggestion.

He was an idiot, but he had to make sure the worst never came to pass. At the very least, he had to find a way to save Kaye.

Swallowing his fear, Bart looked at the skeletal agent. "I'll be honest. I suggested acting in secret. I saw the UZSR fib and cover things up and decided we could do likewise. I proposed the hack and directed the team that programmed it."

As the agent glared back at Bart, a hint of a sinister smile drifted to Lyudmila's lips. Bart sensed Kaye's shocked face turn toward him, but he kept his eyes on the Zirnitrans opposite them. "I'm responsible for all this. Kaye's innocent. The only person you need to interrogate is me."

"Bart..."

Hearing the sorrow in Kaye's voice, he glanced at her, urging her to be quiet. "I'll stay here. Please let Kaye go."

The agent shook his head. "That's not possible. She put the secret hack together."

"Only because she's the heart of Project Soyuz's computing team. Without her, our nations fail. You could replace me with any number of people, but not her."

"Bart—"

He raised his voice to speak over Kaye, his eyes on the agent. "All she did was follow my instructions, and she's essential to the project! Please, you need to release her!" He pitched forward in his chair.

The agent pulled out an expandable baton and pointed it, fully extended, at Bart. "Quiet!" he ordered. "You're covering for her. I don't trust it. We arrest the girl first."

"What?!" Everything was going off the rails.

The agent looked over at Lyudmila for permission. In turn, she regarded Bart and Kaye the way a mountain lioness might observe her prey. The energy drained from Bart's body. He was frustrated and vexed; tears welled in his eyes, and he couldn't lift his head to meet Kaye's gaze. It can't end here. It can't end like this.

Footsteps rang out in the hall, and a series of strong knocks banged against the door.

"I'm coming inside!" called a gravelly voice.

The door opened. Bart turned toward it slowly, fists clenched. He was sure he was going to be formally arrested, but Director Volkov was at the door, cane in hand. With him were the Black Dragon's lead developer and several more engineers Bart recognized. He couldn't process what was happening.

The gaunt Delivery Crew agent was even more shocked at the sight of Zirnitran engineers. "What do you want?!" he barked.

Volkov looked at the baton, and for a moment his brow furrowed. When he spoke, however, it was with great calm. "We came here as soon as we learned these two Arnackians had been taken in for questioning. What did they do?"

"They installed an unauthorized hack on their computer!"

"What ...?"

"We're arresting them."

If Bart sat still and did nothing, the Zirnitran engineers would get the wrong idea. "No, it's a safety measure! That's why I said you had it wrong!"

The agent swung his baton back at Bart. "Be quiet!"

Volkov raised both hands, confusion all over his face. "Which of you is telling the truth?!"

A loud metallic clang filled the room. Lyudmila had slammed her candy tin on the table. "Enough! Listen."

The room fell into silence, and the gaunt man obediently stepped backward. Devoid of any bias or emotion, Lyudmila told Volkov every detail of what Bart had said.

"I trust the Arnackians' explanation," Volkov said to the agent.

"Listen to yourself!" the gaunt man snapped, frustrated.

"I can't see any ulterior motive for installing a program the computer doesn't require," Volkov argued. "If the UK ordered that for some reason, I'm certain Bart and Kaye would've refused."

The agent wasn't about to back down—not yet. "You're allowing this hack even though it wasn't authorized during a meeting?!"

"There's no denying the lack of authorization, but we're discussing an emergency measure that had to be implemented before launch. They likely had no recourse. You may not understand this, since you're not part of space development, but there's no chance of a lunar landing if the HGC malfunctions. Our time-consuming authorization process is the true problem. I'm very skeptical that it's vital to run things past military officials ignorant of digital computing!" Volkov glanced at Lyudmila, his gaze asking where she stood.

Lyudmila popped another candy in her mouth, raising an eyebrow as if she hadn't even been listening.

"Please bear in mind," Volkov added, "that Arnack's computing expertise and technology far surpass ours. As long as the program's used appropriately, I don't object."

"Then prove they're using it 'appropriately'!"

"Do you even know what a program is?" A frustrated edge entered Volkov's voice. "Please, enlighten me—what information could they *possibly* steal by installing one aboard a spacecraft?"

The agent couldn't respond. His face twisted in disgust.

Volkov's cane thumped the floor. "If you aren't well versed on this topic, I ask that you not speak at all. Such ignorance from persons outside space development caused Comrade Mikhail Yashin's death."

"Bart and Kaye have adapted to working here," the Black Dragon's lead developer declared. "They haven't uttered a single complaint. None of the Arnackian engineers have done anything suspicious. We should be ashamed of ourselves—of our utter lack of knowledge! To think that we Zirnitrans assumed the worst of an improvement we saw for ourselves!"

Bart was shocked to hear the Zirnitran engineers defend them. He looked over at Kaye. The pair had little insight into the UZSR's inner workings, but they knew haranguing Lyudmila and a Delivery Crew agent was risky.

Volkov and the engineers surrounded the gaunt man. "To accomplish Project Soyuz, our nation *needs* the UK," Volkov insisted. "I ask that you release our two comrades."

The agent clenched his teeth hard. "Comrades?!" he spat.

"Yes. Comrades in our journey to the moon. Release them."

"Damn you all." The man clenched his baton tightly.

Then Lyudmila cut in. "Release them. Their innocence has been proven."

The agent couldn't believe what he'd heard. "Comrade Kharlova?!"

Lyudmila shot him a chilling look. "Comrade? No idiot's a comrade of mine."

"Wh-what?!"

"How many times have I said it? We don't kill people of value or ability over personal vendettas. The ones we should get rid of are the worthless agents sounding the alarm over nonsensical hacks. Now, release them." She was ready to be done with it all. Before leaving, she turned to Bart and Kaye. "I look forward to your historic achievement."

And then she was gone.

Bart didn't know anything about Lyudmila's motivations. She didn't strike him as hostile. At the same time, she filled him with unique fear that suggested she was a powerful figure he didn't want to antagonize.

Released safely from Delivery Crew custody, Bart and Kaye joined Volkov and his engineers in their minibus and went back to their hotel. The vehicle's windows weren't covered, unlike those in the UK team's bus, so they could look out at the city scenery around them. Bart didn't take advantage of the view, and neither did Kaye. Her tense, nervous gaze didn't leave her feet.

Volkov seemed relieved. "It came to our attention that some do not favor cooperative development. I'm glad we were cautious and vigilant."

"Why did you come to save us?" Bart asked.

"Why ask? You heard everything I said to that agent, I believe." Volkov's expression darkened. "Besides, up until now, there were many we couldn't save, even when we knew their fates. So many were falsely accused and then suddenly disappeared. You came all the way here for us. We couldn't let you share their lot."

Bart got goosebumps, instantly realizing just how precarious the situation had been for them.

"Director Volkov." Kaye lifted her head. "Thank you so much."

Volkov waved her off with a bashful look. "We were cautious of you at the beginning," he acknowledged. "Simply knowing you came from Arnack concerned us. We were unsure how your team would think and act. Particularly you, Kaye, as we do not often see dhampirs here. Our only impressions of dhampirs came from news of their conflicts with humans. At any rate, when we learned that the UK's technology surpassed our own, we were unsure how to

respond."

"It went both ways," Kaye said with a pained grin. "Our impressions of the UZSR scared us."

Her comment seemed to hit a sore spot. Volkov scratched his head of thin hair sheepishly. "Well, Zirnitra is exactly as you thought. I myself cannot speak in great detail, but know this: *Howling at the Moon*'s contents were mostly accurate."

Although it clearly wasn't easy for the man, he'd implied that Zirnitran space development was led by government authorities—and with a heavy hand.

"By the way," Volkov continued, his expression brightening, "we discussed your suggested 'fourth crew member' after the last joint meeting. Would you demonstrate your proposal on-site? We'll equip a facility here."

Kaye beamed. "Of course!"

The bus reached the hotel while they conversed. It was the middle of the night, so the group decided to plan out the on-site demonstration at their next meeting.

As the two Arnackians were about to exit the vehicle, Volkov told Bart, "Hiding our failures was shameful, but we haven't had the strength or opportunity to publicize the truth. I'm sorry."

"Well, Project Soyuz's upcoming missions won't fail." Bart did his best to sound confident. "We'll aim for success, and only success, together as comrades!"

The Zirnitrans chuckled. "All right, comrade!" one said.

Volkov also smiled. "We'll carry off Mission 2, my Arnackian comrades. But know this: In chess, you're still our enemies."

Everyone's eyes fell on Kaye. "I await our next match," she said, smiling back at Volkov.

The silence in the hotel was palpable, and so still you could hear a pin drop. The UK team was probably asleep, completely unaware of what had taken place. Bart and Kaye wondered whether they should go straight to Division

Chief Damon to report that the Delivery Crew had detained them. Since Lyudmila had defused things, Bart suggested bringing up the encounter just before the joint meeting, when Director Volkov could weigh in. Kaye agreed, and the two headed for their rooms.

They both knew the Delivery Crew wouldn't turn up again, yet the hotel's shadows were somehow menacing. When Bart turned to Kaye, uncertainty and concern shimmered in her eyes. It dawned on him that being alone overnight might be a bad call.

"The thought of something else happening is pretty scary. Want to come to my room?"

Kaye nodded without a moment's hesitation.

Bart's room was just as it had been when the Delivery Crew agent arrived—cluttered with clothes and documents. He hurriedly threw them into a corner and let Kaye in. They sat on the small, stiff sofa. It was so cramped their shoulders brushed with each movement. Kaye looked down at the floor.

"I, uh...I guess this sofa's meant for one," Bart said.

"I guess so."

"I know Volkov proposed that on-site demonstration suddenly, but let's give it everything we've got."

"Mm-hmm."

"I can't believe they called us comrades. That made me really happy."

"Yeah."

All his attempts at conversation sank immediately. Kaye looked dispirited and exhausted. Bart wondered if the smile she'd flashed the Zirnitrans was just meant to reassure them. He was worn out too. A day off would've been perfect, but they had meetings to attend. Now that it was already so late, it'd be best for them to get some rest.

"I'll sleep on the sofa. You take the bed."

"Huh?" Kaye looked up at Bart. The sadness in her eyes made him feel like he'd said something out of line.

He panicked. "Uh, well, you were scared, so I figured you'd be here till morning. I mean, we just got kidnapped, right? And the bed's really narrow. If we tried sharing it, one of us would fall off."

Bart's nervous laughter faded as Kaye looked away. An awkward silence settled between them. Unsure what to say, he found himself fidgeting. He took off his glasses for no reason, then tapped his feet until Kaye asked, "Remember the 21st Century Expo?"

"Huh?"

"We talked like this, just the two of us, in your hotel room."

"Yeah, I remember."

They'd been in a gorgeous five-star hotel—a far cry from the cramped room they occupied now. The world was on the brink of nuclear war, and the pair had despaired at the thought of their dreams ending, but they'd ultimately kept their eyes up and chased the moon.

Looking at her left hand, Kaye extended her pale, delicate pinky finger. "We promised to make our dream come true."

Bart nodded. "We swore a pinky blood oath."

That was a very old dhampir ritual. They'd made the vow by cutting each other's pinkies and licking the blood. The sensation of Kaye's fangs in his finger and the metallic taste of blood flashed through Bart's mind. He looked down at his own left pinky as he reflected on the night.

"That still holds, doesn't it? We have the same dream, right?" Kaye sounded sorrowful.

The questions completely blindsided Bart. "Huh?" He couldn't fathom why she'd asked. They were doing their utmost to achieve a lunar landing, but Kaye's tone said she doubted that. "Of course. We've got our eyes on the moon, and we'll make that spaceflight happen."

Kaye shook her head. "You said you're replaceable."

Bart tilted his own head to one side, suddenly confused. "Um, when?"

"While we were being questioned."

The memory slowly resurfaced. "Oh, that. I had to make sure *you* at least made it out of there. I mean, if I got arrested, someone else could cover my duties and keep the project going."

Kaye stared at him, her eyes reproachful. "How can you say that?"

"S-sorry. Don't get me wrong. I don't think my role's easy or anything. It's just, at that point, I thought they'd arrest you if I didn't say something, and..."

"There's *no* replacement for you." Kaye stared at him, tears filling her eyes. "Not ever."

Bart was speechless.

"You never ran from me, even when you caught me sucking blood from my own arm. There's nobody like you. You're the reason I have the life I have now." Tears trickled down her cheeks. "I want to make our dream come true together. I want to watch the moon side by side and dream of the same future."

Bart bit his lip. Now he understood the truth. Since his days of always comparing himself to Aaron, he'd had a bad habit of assuming he didn't measure up to others. Over the last few years, he'd gone off course bit by bit, coming to see Kaye as exceptional and himself as replaceable machinery. That outlook had hurt her without his even realizing.

"Sorry." Kaye wiped her eyes, forcing a smile to her lips. "Got a bit heavy, didn't I? Let's do our best tomorrow!"

She was putting up a strong front, but her voice trembled and her tears refused to stop. Bart couldn't stand seeing her like that, so he reached out and pulled her into a hug. Kaye froze, surprised, then let herself sink into his tight embrace, her tears wet against his neck.

"I'm the one who should apologize." He said each word slowly, holding in the emotions that threatened to burst forth. "I was pathetic... I really was."

Kaye sniffed back a sob as she rested against Bart's shoulder. He gently rubbed her back. "I won't stop believing you're unique and special," he told her. "Nobody could question your talent. I look up to you. You're the world to me. I can't deny how I feel, but I can live as best I can to become worthy of you."

He put both hands on her shoulders and faced her.							



"I won't make excuses anymore—say we're just partners, or that the moon's our priority. I won't shrug things off without speaking frankly. I'm turning over a new leaf." He looked Kaye straight in her scarlet eyes, opening his heart. "I love you. No matter how old we get, I want us to have the same dreams."

Kaye pressed her lips together as fresh tears streamed down her face. "I love you too, Bart. Thank you."

They stared at each other for a while, and then their faces came together, their lips meeting awkwardly. The softness of Kaye's mouth seemed to awaken the traces of her blood circulating through Bart's body, warming him head to toe for a time as short as the blink of a meteor.

They pulled apart, and uncomfortable silence filled the air as their hearts calmed. Kaye's cheeks were as red as her eyes. Bart, likewise embarrassed, wasn't sure where to look. "Hey," he finally said. "The moon's so pretty."

Between the curtains, a silver full moon hung in the sky. Its light sparkled in the tears on the ends of Kaye's eyelashes.

"That peeping Tom. I still hate it." She pointed at it as if casting a spell. "We'll send a spaceship right into its eye and make sure there's no more peeping!"

What she described was just like a scene from the first-ever science fiction movie, shot at the beginning of the twentieth century, in which a cannon fired a spaceship into the eye of the moon.

Some sixty years later, the power of science—not whimsy—would make the lunar landing a reality.

The next morning, Bart wiped his sleepy eyes, changed, and readied himself for breakfast. After he leveled with Kaye, they'd discussed the morning meeting, then elected to sleep in their own rooms. So many thoughts filled Bart's head that he didn't end up sleeping much anyway.

They happened to leave their rooms at about the same time. Though both still felt a bit sheepish, Bart gave Kaye his usual "Good morning," and she smiled back. Nothing huge had changed, and to their shared delight, their

embarrassment disappeared.

Bart ambled to the cafeteria counter to grab his breakfast. He expected it to consist of the usual porridge and fried egg but instead received steaming borscht and a cherry cake.

"What is this?" he wondered aloud. The server behind the counter only grinned at his perplexed look.

Kaye received the same breakfast as Bart, although everyone else on the team was served porridge and fried eggs. "Is it an apology for last night?" she hazarded.

The pair were grateful for the kindness, whatever its cause. The moment they sat down to eat, however, a chef came and placed two more items on the table before them—a peculiar aspic the likes of which one never saw in Arnack and a round loaf of decorated bread. The chef left without so much as a word.

"I guess these are an apology too?" Bart said.

"Oh!" Kaye cried, peering suspiciously at the loaf. Lowering her voice, she added, "I've seen bread like this before."

"Where?"

"On a news report about Mikhail and Roza's wedding!"

Kaye's words took Bart back to seeing television coverage of the event. He *did* remember a huge loaf adorned with two doves symbolizing love. The loaf on the cafeteria table wasn't nearly as enormous or extravagant, but it was certainly reminiscent of the one at the wedding.

The significance hit Bart instantly. "That means this is..." A celebration breakfast? But why?

For a moment, he was confused, but then it hit him like a ton of bricks. Their rooms were all *wiretapped*. As Bart and Kaye glanced at the counter, the Zirnitrans behind it looked away. A hot flush of embarrassment ran through Bart's whole body.

Kaye reddened all the way to her ears. "They...they heard us, didn't they?" Bart's stomach cramped as he thought back to the previous night. He

groaned.

Walking by with his own breakfast, Division Chief Damon stopped to compare it with what he saw in front of Bart and Kaye. "Bit extravagant, isn't it?"

Bart stammered, "I-It's, er...um..."

"I don't care. Just make sure you aren't late for the meeting." Damon gave them a last, dubious stare, then left to sit and eat.

The morning had only just begun, and Bart was already exhausted. "Kaye, we'd better have breakfast...then destroy any leftovers."

"Mm-hmm."

He dipped a piece of bread in borscht and put it in his mouth, enjoying the warm mixture of sweet and sour.

September 1, 1968 marked less than a month before the launch of Mission 2. The goal was for a Rodina spacecraft to rendezvous and dock with a target drone in Earth orbit. Rodina would launch from the Albinar Cosmodrome, so ANSA engineers visited regularly. The Zirnitran engineering team likewise came and went from the Rocket Launch Center, which would send out the drone.

The suspicions and competition between the nations had calmed significantly. While the rivalry hadn't dissipated, it at least wasn't undercutting the work at hand. Both countries made concessions regarding mission publicity, which had long been a sticking point. They agreed the UZSR would televise footage concealing the Cosmodrome's location, as well as postlaunch coverage and certain shots aboard Rodina.

Everyone focused on one step of the mission: the two countries' spacecraft convening in orbit. The UK and UZSR had agreed to collaborate, and Mission 2 would mark the first time ordinary citizens around the world observed the results with their own eyes. Success would provide a concrete example of the fruits of international cooperation, but many feared failure would further sour binational relations.

No matter how the world viewed the circumstances or potential results, those

working on Project Soyuz simply went on working.

Once the latest joint meeting adjourned, Bart and Kaye returned to the UK, sure that Mission 2 would succeed. They knew that the only reason for the UZSR's hidden failures was that the Space Race put its back against the wall. Zirnitra was full of capable engineers, and both nations' crew members—including Steve Howard—drew praise.

Project Soyuz was about to write a new page in the history books.

Interlude 3

MISSION 2'S LAUNCH DATE was September 25, 1968. Long locked in a heated rivalry, the superpowers of East and West now attempted their shared goal: a historic first crewed spaceflight. The mission began with a three-person crew successfully launching from the Albinar Cosmodrome. Their crewed spacecraft, Rodina 2, was numbered to align with the mission. ANSA's Rocket Launch Center then launched its target drone, and both crafts entered Earth's orbit high above the heads of the planet's citizens.

Carefully adjusting their trajectories over time, the spacecraft rendezvoused successfully, and the distance between them smoothly closed as Rodina 2 approached the target drone.

The Cosmodrome's blockhouse radioed the crew. "Rodina 2 and target drone are good to go."

"Roger," came the reply.

Docking began, and the target drone signaled Rodina 2 that it was within range of the docking system radar. As the ground control officers carefully monitored their screens, they noticed Rodina 2 approaching the target drone more rapidly than expected.

They radioed the crew again. "Too fast on approach."

Receiving the feedback, the crew made a decision. "We'll switch to manual controls and reduce our speed."

"Roger. Manual controls confirmed."

Controlling the ship manually required a high skill level. Captain Zhores Rimsky piloted, hoping to make up for the UZSR's past faked rendezvous. Once they'd calculated the timing, Rodina 2 closed in on the target drone, carefully avoiding a collision. Latches closed as the docking module met the target at the designated contact point.

"We've got it," radioed the crew.

All systems were nominal. Spacecraft from two nations had, for the first time in history, met and docked in space. Applause and cries of joy rang through both nations' mission control centers.

"We did it!"

"Success!"

The ground control crew and engineers shook hands and embraced in rapture. It was a historic moment, but Mission 2 still wasn't complete. To achieve their objectives, Rodina 2's crew had to transfer to the target drone. It was essential that the crafts' air pressure match when the docking module hatch opened, and balancing it took hours.

The crew used that time to say a few words to the people of Earth.

"Hello to everyone on the sunny side of the world!" exclaimed astronaut Steve Howard. "I can tell you all, this nighttime view of Arnack's stunning. It's sparkling just like the stars!"

"Good evening, everyone," cosmonaut Zhores Rimsky added. "The most verdant green covers Zirnitra!"

Glued to their televisions, people around the world listened to Rodina 2's crew describe the sights from space. Next, the crew opened a call with the leaders of the UZSR and the UK.

"Our efforts toward peace allowed this truly historic feat," Arnack's prime minister said, his voice cool and calm.

"This mission marks the beginning of an international space age!" announced Zirnitra's enthusiastic supreme leader.

When the air pressure finally matched, two crew members boarded the target drone. Inside were various items UK personnel had left earlier—commemorative saplings, national flags, space food, and a stuffed toy modeled after Kukushka the dog.

Having "rescued" Kukushka, the crew hung the toy by Rodina 2's own stuffed black dragon, allowing both countries' symbols to dance side by side in zero gravity.

Things largely went according to plan, but the crew ran into one issue. A ration bag burst, and strawberry juice floated across the craft interior, glazing the windows pink. It wasn't a dire problem; the crew joked about viewing Earth through rose-colored glass.

As Mission 2 concluded, the crew held a press conference from the stars, making the following statement: "This mission, and the road we walked to accomplish it, prove collaboration can achieve great things in space."

Chapter 5: Where Hopes and Dreams Go

Green Eyes

• очи темно-зеленые •

LATE SEPTEMBER saw Sangrad's trees turn vibrant gold. An abundance of crops from the harvest season filled the local markets, heralding the arrival of the most beautiful, lavish time of year. This period always thrilled Lyudmila because beekeepers gathered for a honey festival. She wandered its grounds and sought her favorite types, engulfed in the sweetest aromas.

This year, she hadn't just looked forward to the honey festival but to progress in space development as well. Following Rodina 2's safe return, media around the globe reported "the end of the Cold War," and excitement about both world peace and the lunar landing grew.

The arrival of a brighter future thrilled UZSR citizens too, making the honey festival an even more vibrant, vivacious affair. Beekeepers were busy chatting about living more prosperous lives. Before long, Sangrad would host a parade for the cosmonauts. There, Lyudmila would celebrate her pawns alongside the people of her nation, although those celebrations would be pretense.

Lyudmila bought her linden honey with heartfelt contempt for the cheerful faces around her. It was indeed a miracle that the UK and UZSR had successfully cooperated in space, especially since they'd once been on the brink of nuclear war. But they'd done little more than rendezvous, and relations between the countries weren't so simple that their problems were now solved. Differing principles, opinions, and thoughts wouldn't vanish easily.

A neighboring country's citizenry had recently staged a coup, and Lyudmila's puppet Gergiev merely watched the revolution proceed rather than intervening with the UZSR military. It was a step toward a new Zirnitra and a reorganized

world. In the UK, human-dhampir conflicts continued, and important figures and activists had been killed. Earth was full of violence; blood flowed in the gutters, and the media fanned the flames.

At the same time, Project Soyuz staged peaceful ceremonies in space, and the upper echelon praised passing celebrations in loud, showy voices. Their tongues dripped viscous honey so sweet the public lapped it up, allowing the lies to fool them. It was all just a means for the powerful to achieve their ambitions.

To Lyudmila, Mission 2's success was but the first step. She was optimistic about the remaining missions, although they'd rely on Arnack's scientific might. Furthermore, she was impatient; she saw the lunar landing as little more than a prologue to victory over death. That was the greatest challenge humanity faced, and it wasn't one individual power could overcome.

"Ugh..."

Lyudmila put a hand over her stomach. Recently, she'd been feeling nauseated to the point of wanting to vomit, and now it was happening again. Perhaps the stark difference between her feelings and the empty joy of the rest of humanity had sparked the sensation. She'd been growing more excited as the lunar landing neared, yet she suddenly felt something was amiss.

Her stomach ached. She'd thought trying some of her favorite honey would help, but the pangs worsened with each step. Sweat dotted her forehead. Her own body was balking at the sweet fragrances that ought to have delighted her. Should she go to a hospital?

Suddenly, piercing pain ripped through her belly. Unable to bear it, Lyudmila dropped to one knee, knocking over a table of honey. The bottles shattered, and screams echoed in her ears.

Her body refused to listen. She collapsed on the ground, and something hot bubbled from her stomach and burst from her mouth—vomit mixed with blood. A cloying, sour stench attacked her nose as her vision faded to dark purple.

The hospital.

Lyudmila crawled forward. Her face was a mess of honey, vomit, and blood. She'd been cut by broken glass, and her forehead stung. Warm blood dripped

from her nose. The taste of steel filled her mouth.

Poison.

When... Where... Who...

Who...

W...h...o...



Indigo Eyes

• очи индиго •

LEV, IRINA, AND THE COSMONAUTS returned to Zirnitra late on September 25 to participate in a parade marking Mission 2's success. Lt. Gen. Viktor met them with a grave expression and the news that Lyudmila Kharlova had died. They'd been told by phone before they left that she was comatose, so the news didn't come as a shock.

In the car to Sangrad, Lev heard more about the woman's death. She'd collapsed at a festival a week earlier and been taken to a dedicated hospital for high-ranking authorities, where she was treated in secret. She'd moaned until she breathed her last, but she hadn't regained consciousness.

Although her symptoms indicated she'd likely been poisoned, the culprit was unknown. The UZSR concealed the truth of her death, since the murder of one of Gergiev's aides would impact domestic affairs. The National Broadcasting Service reported only that she'd perished of an illness.

A stain on Lev's heart faded with Lyudmila's passing. He couldn't bring himself to feel anything like sympathy for her. She'd lived far too boldly. She could've been assassinated at any point, and she'd known the risks of the path she chose for herself. Lev himself would never know her ulterior motives. The woman had lied for so long, she'd disappear as if she herself had been a fabrication.

Lev's problem now was who'd planned the assassination, which could potentially halt space development.

Irina clearly had the same concern. "What's going to happen to Project Soyuz?" she asked.

"The senior officials say it'll continue as planned," Viktor replied. "If the mastermind behind the assassination attempts something like a coup, we're in trouble, but that seems unlikely. And they won't target the Arnackian

astronauts."

He based the latter assumption on the fact that Gergiev would attend the cosmonauts' parade. The man was a coward; if he didn't know who'd assassinated Lyudmila, he'd shut himself up in his office. In all likelihood, the killer had already contacted him to discuss the poisoning. Viktor guessed that the mastermind belonged to Lyudmila's secret organization. They might have been purging someone who played too fast and loose. The Delivery Crew heads thought the same. All the pieces fit.

Eradicating what blocked your goal was an old-fashioned, simplistic approach that sickened Lev, yet his disgust had no target. The truly powerful lurked in the darkness, never touching the people who lived beyond.

How did those powerful people look at Project Soyuz? Did they intend the manned lunar landing to cause global upheaval? Had Lyudmila told the truth about dismantling the UZSR? Even if they planned to use space development for nefarious purposes, Lev remained resolved. He'd keep walking the path to the moon.

The world already overflowed with enmity, conflict, and violence. That wasn't tied to the powerful or the underprivileged. A world of perfect harmony, of happiness for all, only existed in children's books. Living on Earth meant sullying one's mind and body.

Even in a place of such despair, people saw the lunar landing's value and expected great things of international cooperation. They comprised both nations' cosmonauts, astronauts, and engineers. Space development was often criticized as a waste of money, yet people would gather at the parade Sangrad hosted for Mission 2. Rodina 2's success had been celebrated all around the globe.

The joy of the lunar landing—like that of traveling to the world's furthest reaches—might only last an instant. It wouldn't dramatically change most people's lives. As the years progressed, Project Soyuz's forgotten achievements would fade into the fabric of the everyday.

But if that instant of success brought a glimpse of a brighter future, it might be a ray of hope for those who dreamed of the stars above—a ray of light

through the darkness for just a second in one short lifetime.

Still... The word resounded in Lev's heart. As Irina stared out the window, he addressed her silently. The lunar landing means nothing to me if you're sad, regardless of whether it brings the world hope. If someone asked why I was going to the moon, you'd be the answer. I don't know what feelings you're hiding, but I promise to give you the future you hoped for. We'll do what's never been done before when we stand on the lunar surface.

Afterword

DESPITE THE *Star Town* story in the interim, it's been a long wait between volumes!

Up until Volume 5, this series often followed historical events. Thanks to *Howling at the Moon*, we're veering into an alternate timeline in which the lunar landing becomes a collaborative binational project.

I devoted tons of pages to Project Soyuz. That would be unfathomable in an ordinary light novel, but I figured I'd just let it ride. I stuck to my guns that anyone who read this series up till now would be fine with out-of-the-ordinary details. It wasn't just me who thought that, it was...(TBA!)

In reality, if Kennedy hadn't been assassinated and Khrushchev ousted, a collaborative moon landing would've been possible; it's one of history's "what ifs." But there are quite a few differences between this series and history, including the existence of vampires.

I referenced the 1975 Apollo-Soyuz mission for the UK and UZSR's discussions around Mission 2. The real-life project had no issues with computer malfunctions and *probably* no creepy buses (it's terrifying that I can't say for sure). It's also not certain whether a programmer's daughter really discovered the P01 bug while she played in a simulator.

Changing the subject for a moment, *Irina* has become an anime! As I write in each volume's afterword, this is thanks to reader support, and I'm truly grateful. I'm not sure how much information will be public when Volume 6 comes out, so for updates, be sure to follow the official Twitter account @LAIKA_anime. The anime staff have been working on recording and postrecording every week recently.

Now, on to the thank-yous.

I first have to thank distinguished author Shinya Matsuura for all the advice and ideas about cooperative development. He was also a big help overseeing the anime, and I'm really grateful. To Tabata, my editor up through Volume 5: The timing might've been coincidental, but the anime was a wonderful parting gift. I won't forget your work. You were a key player in this story's success.

To my current editor, Yuasa: Thanks so much for being flexible under remote working conditions.

KAREI, thanks for promoting Si**rski (insert shocked emoji here)!

Volume 7 will hit shelves in the near future, so be patient. When I was writing the *Star Town* story, I never imagined masks becoming mandatory! I even got confused a few times as I wrote this volume, wondering whether the characters were too close to each other and needed masks themselves.

At least we can record without proximity concerns. Please look after yourselves, everyone.

Till next time,

KEISUKE MAKINO

From the Author Keisuke Makino

In addition to light novels, I write for games and TV dramas. Lately I've been fascinated by a Georgian dish called chkmeruli, but I can't bring myself to try it because I don't like garlic!

Books by Keisuke Makino

Flick & Break

Flick & Break, Vol. 2

Flick & Break, Vol. 3

Irina: The Vampire Cosmonaut

Irina: The Vampire Cosmonaut, Vol. 2

Irina: The Vampire Cosmonaut, Vol. 3

Irina: The Vampire Cosmonaut, Vol. 4

Irina: The Vampire Cosmonaut, Vol. 5

Irina: The Vampire Cosmonaut, Vol. 6

From the Artist KAREI

I recently bought a fitness game that has you pull and squeeze a ring. My first play session was 3 minutes. Okay, game...let's do this.

Pixiv: 3410642 Twitter: @flat_fish_



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