

MERIDIAN'S SHADOW

by Dan Moore

BOOK ONE:

DETONATION

CHAPTER ONE

Fierce pain. Icy hot needles shot through young Hunter Logan's right index finger. All thoughts of an exhilarating camping trip dripped away as he dropped the knife, now crimson with blood. The boy had been carving a tiny piece of wood with the razor sharp blade. His grip was misplaced and the blade had slipped. A chunk of meat now dangled from the side of his knuckle on a flap of skin.

An older boy watched gleefully. "I told you. Can't carve something that small."

"Doofus!" said another. It sounded like a curse. Two other boys were laughing and shaking their heads.

Hunter was on a camping trip with a group of boys in his scout troop. They rode him mercilessly about his interest in science and his clumsiness. He wanted to be their buddy. He wanted their respect, but nothing he did seemed to earn it. One on one with the boys, Hunter would feel a connection, believe that some inroads had been made into friendship, but together they were a pack of derisive animals.

Hunter squeezed his finger, trying to stem the flow of blood. He turned away from the boys, hiding his tears. He was embarrassed and angry. Now they had another reason to hate

him. He should have been more careful. Hunter looked at the bright red splotches on his clothes. His uniform was ruined. Even worse, he realized he would never gain the friendship of the other scouts. Through one lapse in judgment, he had lost it all.

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The Selene Station revolved around the moon in her elliptical orbit, one hundred fifty three kilometers above the lunar surface. The station had a large photovoltaic array whose wings tracked the sun as Selene made her circuit around her mistress. She was an old space station. Like the lunar deity for which she was named, Selene had been supplanted by newer incarnations. Until recently, she had been a barren sentinel: relegated to hosting a few lunar communications and navigational systems. Now she had been resurrected by the Meridian Corporation, a vast offworld conglomerate, to meet the needs of NARI, the Nanotechnology Advanced Research Institute. A gleaming new laboratory had been built within her hull, providing a zero-g environment for NARI research.

Dr. Hunter Logan, the co-director of NARI, floated in the lab with his wife Adrianna. They held hands, glancing at each other as a technician talked quietly into a headset. Larson Daniels, the chief correspondent for the Inner System News Syndicate smiled benignly at the couple. He glanced down at his monitor. The camera shot framed the two scientists perfectly in front of the new laboratory. "Dr. Logan."

"That's us," Hunter smiled. "Just call us Hunter and Adrianna. It's easier."

Larson grinned. "Hunter. So I get it right, what are your official titles?"

Hunter glanced at Adrianna. She winked back at him and said, "We're the co-directors of NARI."

"Why have you built this new laboratory on the Selene Station?"

Adrianna let go of her husband's hand. The camera woman read the telltale signs and pushed in to a closeup. Adrianna was a beautiful woman with dark, close cropped hair and a quick, disarming smile. "Well Larson, as your viewers know, our work has been somewhat controversial. We've been building

machines out of particles that are measured in nanometers. A human hair is about 10 thousand nanometers in diameter, so our machines are pretty small. Our work is called molecular manufacturing. People have been worried that our work might harm earth's environment. New international laws prevent us from doing our research on earth, so we have partnered with Meridian Corporation to build this new laboratory on Selene Station."

"Your most vocal critic has been Damon Trask of the Citizen's League." Larson's smile was gone. He only had a few minutes for the interview and had to press on with the hard, probing questions. "He claims your work is a danger to humanity. He spearheaded the movement to outlaw your work on earth and has vowed to do everything in his power to stop your research all together. What do you have to say about that?"

The camerawoman saw Hunter draw in a breath. She pulled back to a two shot of the couple and then smoothly zoomed in for a closeup. "You may not believe this, but we understand his concern. Frankly, I'm glad we're here in lunar orbit. The phase two machines are completely isolated from the earth and the offworld population centers."

"What are these phase two machines?"

Adrianna offered Larson a radiant smile. "Right now, they're indiscriminant killers. Our goal is to program them to destroy the deadly pathogens and cancers that plague humanity and its environment. Once we are able to train them, the phase two machines will hunt specific compounds and molecules. They'll bond with their target and break down its internal structure. When their work is done, they'll become dormant, since the target no longer exists."

"You say they're indiscriminant killers. What does that mean?"

Adrianna locked the interviewer in her gaze. "In their present form, they target everything. We call them piranha machines because they're very aggressive."

Hunter nodded. "They won't stop eating. They're like entropy machines. They feed on order and leave chaos in their wake."

Larson turned pale. "You have them here?"

Adrianna smiled innocently. "They're right behind you."

Larson jerked around too quickly in the zero-g. He reached for a nearby handhold to stop his spin. The camerawoman swung around smoothly, framing the image of a large rectangular device bolted to the laboratory deck. A large holochamber was integrated into the unit and displayed a complex arrangement of nanoscale particles. Hunter floated over to the apparatus and gestured toward the holodisplay. "You're looking at one of the phase two machines."

Adrianna floated to Hunter's side and took his hand. She noted the fear in Larson's eyes. "The containment unit holds the phase two machines in stasis and provides a lab module that permits us to manipulate them safely. It has many safeguards. Remember, we're working with these machines every day."

Hunter gave Larson a proud smile. "Would you like a demonstration?" Larson paused, uncertain. The knot of fear in his chest was almost perfectly balanced by the curiosity in his brain. Hunter didn't wait for an answer. He worked the controls of the containment unit. The view in the holochamber zoomed back to reveal a smaller nanoscale structure floating to the right of the phase two machine. It looked like the skeleton of a soccer ball: carbon atoms arranged in a geodesic sphere. "This is a nanodiamond. It's made up of 275 atoms and is 1.4 nanometers in diameter. To give you a sense of scale, the hair on your head grows about ten nanometers every second. Watch what happens when I nudge it closer to the phase two machine."

The nanodiamond moved slowly toward the larger object. As it grew closer, the inner workings of the nanomachine began to undulate, its outer layer prickled with tiny structures. Like opposite poles of a magnet, the nanodiamond and the phase two machine snapped together. Immediately the machine tore apart the ball-like structure of the nanodiamond, leaving a dissociated cloud of carbon atoms in its wake.

Larson was visibly shaken. "What would happen if that piranha machine got out of the containment unit?"

“It would disassemble this laboratory and the Selene Station.” Hunter’s voice was calm and analytical.

“Destroy the whole platform.” Larson’s voice cracked.

Adrianna nodded thoughtfully. “That’s right, but we are working to tune the machine’s appetite so it only likes certain things. Once we have accomplished that, the phase two machines will be quite harmless.”

Larson regained his composure. “This could cause a monstrous plague.”

Hunter shook his head. “That will never happen. I’ve dedicated my life to finding ways to heal the environment. It’s true. These phase two machines are dangerous in their present form. That’s why we’ve taken great precautions. But I urge you and your viewers to see their potential. Once we’re able to train them, these nanomachines will put an end to some of earth’s most vexing problems.”

Larson’s face became dispassionate: an unreadable mask. “Why should people trust you?”

Hunter paused to choose his words carefully. “We know what we’re doing. There is no need to fear our work. I stake my reputation on that.” Unconsciously, Hunter rubbed the old scar on his right index finger.

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Emile Hastings was a precocious nine year old. He floated next to his mother, Dr. Maryanne Hastings, on the residence deck of Selene Station. He hadn’t stopped grinning since he arrived on orbit. His father had convinced his mother to bring him along. Maryanne didn’t think it was a good idea. She cited the risks of having him on board, but finally agreed to bring him. She wanted to keep the fragile peace with her husband, Dr. Robert Hastings. Both were NARI scientists and struggled to combine parenting with the all encompassing demands of their research.

“Wow, mom! I can fly!” The boy launched his slender frame across the cabin, bouncing from handhold to handhold.

“Easy, Em. You could break something. Slow it down.”

“But dad said I could go fast.”

“I don’t care what your father said. Slow it down.”

“Aw, mom...”

“Don’t ‘aw, mom’ me, young man. If you don’t behave I’ll send you back down to Copernicus Base with the Logans.”

“Okay. Okay.” Emile kicked off much slower this time, somersaulting as he crossed the residence deck.

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Dr. Robert Hastings lifted Samina Haddad’s body, his hands cupping her buttocks. Her bald head was thrown back and his face was buried in her breasts. Her perfect skin and slender form excited him. He stood naked in Samina’s private living quarters on Copernicus Base. The low lunar gravity enabled him to lift his lover up over his hips effortlessly, her legs folded around him. He raised and lowered her rhythmically; allowing her weight to press them both toward the inevitable moment of climax. Robert could feel her ecstasy rising with his own. He lowered her, making one final thrust. They merged together into a nexus of physical and emotional joy. They embraced, breathless from their intimacy.

“Hmmm,” The sound came from deep within Samina’s throat.

Robert managed a satisfied sigh. “I could never do that on Earth.”

Samina gave him a devilish smile as she reached her hand down toward his groin. “I’m glad you talked Maryanne into taking Emile.”

“I’ll pay for it later.” Robert kissed her. Samina was a beautiful woman. She had joined the NARI team a few weeks earlier and he was drawn to her immediately. The closeness of the NARI team had offered them an irresistible opportunity. At first there were stolen glances: infatuation in the shadows. Their secret passion ripened and they had thrown themselves willingly into the abyss of sensuality. There was no climbing out of it.

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Hunter and Adrianna shook hands with Larson Daniels and sealed the airlock. The news correspondent was staying behind on Selene Station to conduct several more interviews. They left him with Marianne Hastings and Valerie Lopez, two of NARI’s lead researchers. The Logans took their seats and the jumpship undocked for their return trip to Copernicus Base.

They never tired of the view: Selene Station rising above them as they fell away toward the ancient, cratered surface below.

“We’ve complied with every law and demand.” Hunter tapped the arm of his seat. Adrianna could sense his anxiety. “When are they going to stop questioning our motives? When will they stop accusing us of playing God? Daniels has asked me the same questions every time he’s interviewed me. When will my answers be enough?”

Adrianna touched his arm gently. “It’s his job, Hunter. He’s a bloodhound. He’s intoxicated by the scent of the story and he won’t let go.”

“That bastard drove us off world single handedly. The first time he came to NARI I was naïve. I was too honest with him. He took my words and spun them into a tale of horror. He intentionally tapped the fears of his audience and started a global firestorm of protest against us.” Adrianna squeezed her husband’s arm, but said nothing. “Why don’t people trust me?”

“They don’t know you. People are scared easily. What we do is misunderstood. You take it too personally. Step away from it and remember whose opinion matters.”

Hunter studied Adrianna’s face. She was a woman of smiles. He touched her hand and nodded slowly. “You’re right. But it doesn’t make it any easier.”

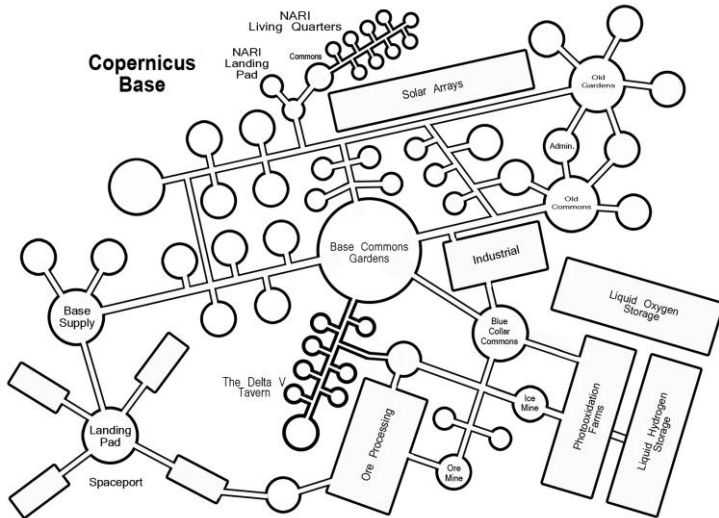
“Listen to the people who love you, Hunter. You know who we are and we respect you. We know how pure your intentions are.”

Hunter squeezed her hand. “Yeah, I know.”

Adrianna leaned over and pecked him on the cheek. She didn’t understand why someone as smart as her husband could be so insecure. She couldn’t change him. This was a lifelong struggle for Hunter and she knew it wasn’t the last time they’d speak of it.

Copernicus Base sat inside the rim of an impact crater named after the famous Polish astronomer, Nicolaus Copernicus. Dozens of dome structures, fabricated from the lunar soil, rested on the floor of the crater. A huge glass hemisphere dominated the center of the base. The Base Commons, as it was called, housed a lush garden with grass and trees, food and flower gardens, benches and walkways.

Microstructures within the dome's aluminum silicate glass adjusted its opacity in order to protect her treasure from the burning sun.



The main thoroughfare of the base was a long corridor which bisected the gardens. The huge base supply dominated the western end of the concourse and the original base commons lay on the eastern end. South of the long corridor was the base spaceport and the Copernican mining operation. The northern side of the base was filled with domes of various sizes, tied together in a labyrinth of connecting tunnels. There were residence domes, schools, research facilities, shops, light manufacturing and administration. A small domed garden stood in the northwest corner of the base, a tribute to the early days of the Copernican settlement.

Copernicus was one of fourteen lunar bases owned by the Meridian Corporation. People of all races and classes scratched out livings in a hierarchical society, a lunar caste system. The vast majority of Copernicans shared cramped quarters in overcrowded domes. The wealthy minority had domes to themselves. One of the privileged few was the base director. Appointed by Amos Cross, the administrator of Meridian Corporation, the director served as the base's legal and administrative authority.

The Logans' jumpship swept around the perimeter of Copernicus Base and settled on a small private landing pad on the north side of the complex. The pad adjoined the living quarters for the NARI scientists and their families. A common area was housed in the largest dome in the residence complex. There was a long access corridor branching away from it. A series of smaller residence domes sprouted to the left and right of the corridor like leaves.

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Sprite Logan sat lightly on the edge of her bed, folding smart wrapping paper over a box containing her father's birthday present. The seventeen year old painstakingly creased the paper. She wrapped the gift with the dexterity of a surgeon, her eye catching every misalignment of the pattern. She folded the paper twice and tore off the unneeded piece. The paper, trained to tear with a clean edge, pulled away effortlessly. She pressed the free edge of the wrapping paper down against the box, the paper adhering to itself. Sprite smiled with satisfaction. Her attention to detail came from her father, her stubbornness from her mother.

Sprite was exceedingly bright and was fond of artificially intelligent machines. She considered AIs her friends. They didn't get mad or take offense. They didn't stab her in the back. They were straightforward and honest. Working with AIs was a study of diplomacy and foreign affairs. She understood their culture and their language.

Sprite picked up her father's present and held it in front of her card comp. "What do you think, Wiley?" Sprite loved an ancient cartoon about a coyote and a roadrunner. She named her AI in honor of the coyote who never gave up.

"It's beautiful," replied the AI. "Very precise. I notice variations in the alignment, but they are undetectable by the human eye."

Sprite laughed. "I'm glad you approve." Her piercing blue eyes twinkled at her digital friend. "Please remember to apply human parameters to your judgment algorithms."

"Applying." Sprite rotated the present so Wiley could see it from every angle. "It's an excellent job for a human."

"Send a picture to Uncle Prescott. Call it 'Sprite's present

for Hunter's birthday.' Encrypt it and send it the usual way."

"Done."

Two weeks earlier, Sprite had moved into the NARI living quarters with her parents. She quickly adapted to the lunar gravity and was thoroughly enjoying her new life. She became enamored by Samina Haddad, NARI's new research cybrarian. She was Sprite's idea of the perfect woman: beautiful, brilliant and an experienced space dweller. She wanted to walk like her, talk like her and look like her. Sprite could have cut her hair short like most offworld women, but she wanted to be like Samina, so she shaved it off. Samina was bald, so bald was beautiful.

Dr. Adrianna Logan entered her daughter's room. "Dad and I are back from Selene Station." No response. Adrianna could feel her daughter's cool reception. She looked approvingly at the present. "Great job on the wrapping."

Sprite shrugged. "If you say so."

"I was just trying to say something nice." Adrianna sat down on the bed next to her daughter.

"Fine. You said something nice." Sprite refused to make eye contact.

Adrianna ignored her daughter's attitude. "You're good at wrapping." She reached out to touch Sprite's shoulder, but her daughter pulled away.

Adrianna sat for a moment. Over the past several years a seemingly impenetrable wall had formed between them. Adrianna had tried many times to offer her daughter an olive branch: a vain attempt to make peace in their familial cold war. She had no idea what had started it and she didn't know what she could do to end it.

"I thought moving to the moon would give us a new start." Sprite folded her arms tightly. Adrianna knew she shouldn't take it personally, but her daughter's attitude broke her heart. "Why are you so angry with me?" Still no response. Adrianna decided to try another approach. "I used to get mad at my mother..."

Sprite cut her off. "I'm not like you and you aren't like grandma!" She pulled her legs up to her chest and wrapped her arms around her knees. "Would you please leave?"

Adrianna left her daughter's room without another word.

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The NARI common area hosted spaces for meetings and relaxation, as well as dining and exercise. A large viewport occupied one wall, offering an expansive view of the lunar surface. The main entrance to the living quarters was set into an alcove opposite the viewport. The corridor providing access to the residence domes was cut into the wall near the dining area. Clusters of comfortable chairs and two work tables occupied the center of the dome. A large format holographic chamber was built into the wall to the right of the viewport.

Hunter Logan stood before the holochamber. Maryanne Hastings could be seen in the three dimensional display, floating on Selene Station's residence deck. "Larson is finishing up his interview with Val. He should be gone within the hour."

Hunter nodded to his colleague. "Very good. I'll be glad when we can get back to work. I'm not cut out for this publicity business."

Maryanne pulled herself closer to the camera. She was almost life-sized in the holochamber. She spoke with a hushed voice. "Me neither. That guy gives me the creeps. I think he's going to sensationalize our work and stir up everybody's fear..."

The sound of a muffled explosion came through the audio link. The image wobbled. Hunter could see Maryanne's smile morph into a concerned look as she grabbed a handhold to steady herself. The lights flickered and alarms began to chime.

"What was that?"

"We've had an explosion up here, Hunter." Maryanne checked an instrument mounted to the bulkhead. "The pressure is holding steady. I don't think we've breached the pressure hull."

"Where was it?"

"Below me. I think it was in the lab."

"Check it out, Maryanne. Let me know if we have any injuries." Young Emile floated over to his mother. He was no longer smiling. Hunter watched Maryanne reach out as he grabbed her waist. A wave of foreboding coursed through Hunter's stomach.

"Will do."

Hunter glanced at the control panel next to the holochamber. "Martin?"

"Yes, Dr. Logan?" Martin was the artificial intelligence that supervised the NARI living quarters. His voice was crisp and businesslike.

"Get everyone in here, please. We have an emergency."

"I'm on it, sir."

Within a few moments, the common area was filled with people. Hunter told them what little he knew of the explosion. All eyes were on the holochamber when Maryanne reappeared. Her face was drawn into a flinty scowl. Hair tousled, hands shaking, she visibly pulled herself together to make her report. Valerie Lopez floated next to her.

"Pete Cushing and Mattie North were in the lab when the blast occurred." Maryanne gestured toward the woman next to her. "Val was on the observation deck with Larson Daniels and his crew. Benson was doing a routine inspection of the life support system on the utility deck."

"Can you get to Pete and Mattie?"

"They're gone, Hunter. It was a pretty big explosion. The panels on the inner airlock door are bowed out. If they survived the overpressure, they would have been killed by the flying debris. We've been listening to the contents of the lab banging against the bulkheads for the last five minutes. The place sounds like a clothes dryer full of marbles. It's like Brownian motion in there. There's no gravity to stop things from bouncing around. Val's going to do an inspection as soon as we think it's safe."

"Is there fire?"

"The AI reports that the suppression systems kicked in immediately. There's no fire. We still have atmosphere in the lab. Pressure is holding steady."

Hunter nodded slowly. "Let's get in there and see what we've got."

In a matter of moments, the image in the holochamber dissolved into a view of the passageway outside the laboratory airlock. The image bobbed back and forth. It was coming from Valerie Lopez's helmet camera.

"I'm entering the airlock now." Val was in her detached, scientific observer mode. Her voice was cool; almost matter of fact. Everyone watched as the outer hatch opened. The inner door loomed before them, slightly distorted by the wide angle of the helmet camera lens.

Adrianna grabbed Hunter's arm. "Look at that." The inner hatch, once smooth and straight now bulged outward.

"I think it will still open," reported Val. She operated the controls and the door swung inward toward the laboratory beyond.

Debris poured out through the open hatch. The laboratory deck was dark. Val turned on her helmet lights which cast milky shafts through the churning, shattered remains of the lab. Each step revealed more wreckage. Delicate instruments were twisted beyond recognition. Racks of complex equipment were torn from their anchors and thrown like toys in the hands of an impetuous child. Now they floated in zero-g, a suspension of destruction in an ocean of fouled air.

"Careful not to tear your suit," Adrianna cautioned.

Val pushed forward into the debris. The space in front of her took on a reddish cast. A bloody torso floated under a shattered console. "I think it's Pete," Val whispered. She turned her head. A lifeless face, ruptured and torn hung next to her. It was Mattie North. "Oh my God."

Sobs broke the silence as Val turned away and continued her inspection. "What about the containment unit, Val?" Hunter was beside himself.

"I'm going over there now."

Hunter held his breath as he waited for Val to make her assessment. She took her time avoiding the torn metal and plastic that hovered around her. The containment unit was still bolted to the laboratory deck. The holochamber was gone, broken into a thousand pieces and distributed around the compartment. As Val moved closer, the image cleared. The top half of the device was sheared away, revealing the delicate inner workings, now ripped loose and floating on tethers of torn wiring above the cavity that once held the phase two machines.

Val's voice was a cool, lifeless whisper. "We're dead. We're all dead."

CHAPTER TWO

Meridian Corporation's center of operations was on the far side of the moon. Jackson Base was the largest spaceport in the solar system and serviced the rapidly expanding commerce of the off world colonies. The sprawling complex was built on the terraces of the Jackson Crater. Its rim was 71 kilometers in diameter and had an extensive ray system spreading out across the lunar surface. Giant photovoltaic arrays blanketed the bleak landscape, providing electricity for the base in tandem with her newer fusion engines. A large well system was driven deep into the lunar surface. There were factories and warehouses; residence domes and research facilities. Halfway up the crater's rim, perched on a broad terrace, stood Meridian Corporation's headquarters: a complex system of domes and tunnels surrounding a breathtaking enclosure made of glass and stone which housed the offices and residences of Meridian's elite.

Meridian Corporation was humanity's most powerful economic force. It was behind the colonization of Mars, the development of hundreds of mining and research settlements in the asteroid belt and fourteen lunar bases. Meridian influenced every aspect of life beyond earth's gravity well. It was the de

facto government for the offworld colonies, providing infrastructure and critical goods and services to everyone. Meridian Corporation was as secretive as it was ubiquitous: guarding her immense resources with a small army of security forces with state-of-the-art weaponry and an impregnable digital network. Meridian hadn't built her corporate center at Jackson Base by accident. The privacy of the far side of the moon was the perfect place to establish an indomitable seat of power and commerce.

Amos Cross was a short, compact man. As the chief executive officer of Meridian Corporation, he had guided the gigantic company up the mountain of success for an unprecedented fifteen years. He was smart and ruthless. A mystique surrounded him which imbued him with almost godlike power. No one challenged the great man. Everyone deferred to him. He had risen beyond the need for wealth. He glided freely and authoritatively through life; granting and withholding political and economic power in his slipstream.

His office was a giant holographic chamber. Everything was virtual and interchangeable: from the artwork on the walls to the images in the great viewports which typically presented the breathtaking vista of Jackson Base. He could place displays of data and imagery anywhere in the room. He used his office decor as a weapon, changing it to disorient and manipulate his visitors. Cross did not believe in furniture of any kind. For him, they were signs of lethargy. He took all of his meetings standing up, constantly prodding his subordinates though agenda items like a cruel jockey bludgeoning his horse toward the finish line.

Cross thrived in the lightning pace of his work. Why do one thing at a time when he could manage a dozen? Meridian medical had designed a cranial implant to enhance his productivity. A thought would link him with anyone in the corporation. Sometimes Cross would link with someone through the implant and discuss a seemingly irrelevant matter in the middle of a face to face conversation with someone else. He was like a man playing ten chess games simultaneously. He played all of the pieces, all of the time in a bewildering flurry.

One never knew what Amos Cross would do next. He enjoyed the confusion he engendered. In fact, he depended on it.

The great man's office was awash in brushed gold and deep burgundy. Half a dozen virtual displays presented constantly changing, up-to-the-second status reports on Meridian Corporation's Mars holdings. Across the room, on a small display, was a live news feed. Larson Daniels, the news commentator from the Inner System News Syndicate was reporting from the observation deck of Selene Station. "What just happened?" Amos Cross looked up from the virtual file folder that floated in the air next to him. He stabbed a finger at the display. A glowing red boarder appeared around it. He spread his fingertips and the display quadrupled in size, the audio level increasing proportionally.

"A few moments ago, the Selene Station shuttered. We heard a muffled explosion below us. We are being told that something blew up on the lab deck. We were there, just hours ago with Hunter and Adrianna Logan, the co-directors of the Nanotechnology Advanced Research Institute."

A segment of Larson's interview filled the screen. Cross thought of his assistant, Susanna Frost. She responded immediately. "Coming, sir."

Seconds later, the large doors to Cross's office opened. Susanna Frost entered cautiously. She paused by the entrance, waiting for her boss to beckon. She stood in a sleek, form fitting business suit. Her hair was dark and cut in a medium hairstyle with bangs and layers. She would have preferred closely cut hair, but Amos had insisted on this particular style.

Susanna had grown up in a fractured family. Her father left when she was nine years old to seek his fortune in the asteroid belt. Susanna and her mother had to fend for themselves. Her mother was a strong woman and started her own business. Susanna grew up quickly, working side by side with her mother as they scratched out a life for themselves. She had married, but was single again, her husband having left her for another woman. He claimed their marriage was unsatisfying. Childless and depressed, Susanna poured herself into her job at Meridian, trying earnestly to satisfy Amos Cross.

Cross gestured for her to approach. "Susanna. There has been an explosion on Selene Station."

"The new NARI lab, sir?"

"Yes." Cross turned up the volume on the news report.

"...Dr. Logan assured me that NARI's new product, a voracious nanoscale device they call a 'piranha machine,' is well protected. I asked him about the chances of his work unleashing a monstrous nanoplague on humanity." Larson paused as Hunter Logan's face appeared on the screen.

"That will never happen. I've dedicated my life to finding ways to heal the environment. It's true. These phase two machines are dangerous in their present form. That's why we've taken great precautions. But I urge you and your viewers to see their potential. Once we're able to train them, these nanomachines will put an end to some of earth's most vexing problems."

Larson's face became dispassionate: an unreadable mask. "Why should people trust you?"

Hunter paused, choosing his words carefully. "We know what we're doing. There is no need to fear our work. I stake my reputation on that."

Larson's face appeared again. "We will find out if Dr. Hunter Logan can be trusted. We are waiting for a report on the extent of the blast damage and whether or not NARI's prized piranha machines are still under the control of their masters."

Cross muted the audio. He noticed a small fleck of dust on his shirtsleeve. He scowled and cocked his head, mentally summoning his personal assistant. "Veni? I'm going to need a new shirt. I'll be in my quarters in five minutes."

He turned toward Susanna without skipping a beat. "These scientists are finally developing something useful. How is our intel?"

"We have a source on the team. I'll find out what happened and what they're planning to do."

"Good. Stay on top of this. Don't disappoint me." Cross looked at Susanna's suit. "What color is that?"

"It's Cerulean blue."

Cross gave her a disapproving look. "I don't like it. You'd look better in carmine." He turned his back to her and launched into another conversation. Susanna felt like she had been stabbed with a knife. She blushed and left the office.

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Aurora North trembled as she sat on the couch, her knees drawn up to her chin, her eyes wet with tears. Sprite sat next to her, wrapping an arm tightly around her friend. Adrianna was perched on a small table in front of the sofa. There was a momentary truce between mother and daughter as they tried to comfort the girl.

"How did mom die?" Aurora's voice cracked as she fought back her tears.

"She was in the lab on Selene Station. There was an explosion." Adrianna didn't know what else to say. She paused awkwardly, believing the right words could help: a fallacy of the first order. Aurora sobbed. She twisted a sodden tissue in her left hand while rocking back and forth against the cushions. Her breaths were jagged gasps, her body shaking under the impact of impossible news. "She didn't suffer." Adrianna felt powerless and stupid.

Sprite gave her friend a squeeze. "It's going to be all right, Rory."

Rory pushed her away. "Don't say that!" Sprite could feel her friend's tears as the wet tissue brushed against her arm. "It's not going to be all right!" Sprite slid away from her, startled by the outburst. Rory glared at her, daring her to offer another platitude.

Sprite looked away. "I'm sorry."

The anger drained from Rory's face. She reached out and touched her friend's arm. Sprite looked back at her. Rory's eyes were red and swollen. Her tears streamed down her chin, soaking the knees of her slacks. She slowly tipped her head to the side until her ear rested on her knees. Then, ever so slightly, she offered her friend a wordless nod.

Sprite looked up at her mother, who in a moment of sheer brilliance said nothing.

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Hunter Logan stood near the holodisplay in the NARI common area. Several members of the NARI team had gathered with him to hear the latest news. Maryanne Hastings and Arvid Benson were visible, floating on the residence deck of Selene Station. Emile Hastings was clinging to his mother's side. Hunter glanced at the young man who stood at the holodisplay controls. "Jenson? Is the transmission secure?" At twenty six, Jenson Reed was the youngest member of the NARI team. He was NARI's comm/comp specialist. He had a wrestler's body, strong and muscular, but was a stereotypical engineer. He lived out of his head, was extremely organized and totally oblivious to fashion and emotions. Jenson was a quiet person, not easily drawn into casual conversation. He was much more comfortable working technical problems. His stubby fingers danced on a virtual control surface next to the display.

"Yes, sir. It's encrypted point to point. Selene Station to us."

Hunter thanked him and turned back toward the display. "How's the link, Maryanne?"

"Good, Hunter. We can see and hear you fine." Her eyes were red, her face lined with stress.

Jo Smith and Tyson Edwards sat side by side on one of the couches near Hunter. Jo was a slender woman with dark hair and a swimmer's body. She took in everything. Her face was drawn into a frown as she looked carefully at Maryanne and Emile. Tyson fidgeted next to her. He was a bundle of nervous energy: brilliant and unstoppable. Tyson's red hair had a natural wave that made it impossible to comb. He insisted on wearing old wire rim glasses rather than submitting to ocular surgery to correct his vision. Jo put her hand on his knee and pushed down hard. "Will you please sit still?"

Tyson grimaced. "Hey, that hurts!"

"Then sit still, oaf."

Tyson willed himself to sit like an immovable statue, a placid venire over a restless sea. Jo patted his knee.

Hunter let out a long breath, keeping his attention directed at Maryanne. "Some bad news today."

"Got that right." Maryanne ran her fingers through Emile's hair.

“Is Val still in the lab?”

Maryanne nodded sadly. “She refuses to come out. The phase two machines are in there and she doesn’t want to contaminate the rest of the station.”

Arvid Benson tugged at a handhold and moved closer to Maryanne. “We have a hypothesis.” Arvid was emotionless. “We’re thinking the blast destroyed the phase two machines. Val is going to hunker down for several hours and watch for any telltale signs.”

“How much air does she have?”

“She’s coupled into the station supply. She’s good for days.”

“I’m sure she doesn’t want to spend days in that suit.”

Benson smiled stiffly, then nodded. “Yes. Of course. You’re quite right about that.” Hunter looked back at Maryanne. “Where is Larson and the camerawoman?”

“They’re on the observation deck. He wanted to be part of this conversation. Wasn’t too pleased when I refused. I think he’s talking to his producers.”

“Let’s keep him out of the loop until we know what we’re going to do.”

“That’s not going to be easy.”

“But it’s necessary.”

Maryanne nodded. There was a noise behind Hunter. Maryanne’s eyes narrowed, her face hardening. Hunter glanced over his shoulder. Robert Hastings had entered the common area with Samina Haddad following close behind him. Too close.

“Maryanne.” Robert stopped in his tracks. Samina paused, then took a place toward the back of the group. She made no attempt to avoid Maryanne’s glare. Robert stepped toward the holodisplay.

“Daddy!” Emile reached out for Robert as if he could bridge the distance between them. “I’m scared. Something happened.”

“Don’t you worry, Em. Mom will take care of you. There’s nothing to worry about.”

Hunter shook his head at the lie, but Robert ignored him, his eyes riveted to the holodisplay. “How are you holding up?”

It was a vain attempt at affection. Maryanne gave him a hard, accusing stare but said nothing. Silence held everyone in a tight embrace.

Maryanne's dark hair was pulled back and gathered into a pony tail with a rubber band. Her jump suit did little to hide her stocky build. She looked at Samina, taking in the woman's slender, muscular beauty. Then she gave her husband an icy glare. Guilt roiled in Robert's stomach. He could feel the blood course into his face. Maryanne nodded almost imperceptibly. "What do you expect, Robert? Emile and I are here and you are conveniently down there." No one breathed. Robert looked away from the holodisplay, unable to meet his wife's cold stare.

"What can we do to help?" Hunter tried to steer the conversation back toward the crisis at hand.

Maryanne looked back toward Hunter, her expression softening. "Not much. Arvid and I will stay in contact with Val while we wait for signs of the nanomachines in the debris field.

Hunter nodded. "Patch her in, will you?"

"I'm here." Val's disembodied voice drifted over the audio link. She spoke in a whisper, as if she was standing at the altar in some grand cathedral.

"Hey, Val." For an instant, Hunter didn't know what to say. "We're all pulling for you down here. I hope the blast destroyed all the phase two machines."

"Yeah. That would be good." Her whisper was raspy.

Hunter couldn't tell her how he really felt. He couldn't say, "You're going to die, Val. Those well engineered phase two machines will dismantle each and every one of your molecules." Finally he said, "Keep your chin up." but immediately cursed himself for using such a cliché. There had to be a better choice of words somewhere. Sometimes hope was a curse.

"Gotta keep a positive attitude." Her voice was trembling. "I'll have Maryanne alert you if anything happens."

As the screen darkened, the common area erupted into a murmur of voices. Robert Hastings spoke with no one and strode quickly from the dome. Alexis Wren had been wandering back and forth behind the group during the holotransmission. Now she stood near the main entrance to the NARI living quarters. She had premature grey hair and a thin, emaciated

frame. Alexis' world was her science. She meandered through life, preoccupied by the contemplation of nanoengineering. People were like ghosts to her: apparitions inhabiting a separate, parallel reality. Her quirky liabilities were offset by her absolute brilliance. Alexis would spend days on end mulling over a seemingly insurmountable problem and come up with an elegant solution.

The NARI team was stitched into a patchwork quilt of conversation. Samina Haddad had separated from the group and stood alone at the viewport, trying to lose herself in the stark panorama of the lunar surface. In a rare moment of warmth, Alexis approached her. "Maryanne doesn't like you."

Samina was startled by the comment. She turned to the gray haired scientist, her tanned athletic form juxtaposed with Alexis' pale, withered body. She studied her for a moment, wondering if she was trying to be funny. One was never sure with Alexis Wren. Finally, Samina decided her colleague was being sincere. "You think?"

"You've been copulating with her husband. That's a taboo in this culture. I'm sure she's resentful and perhaps somewhat threatened."

Samina stifled a laugh. Alexis' choice of words was precise but insufficient, like the utterances of a brilliant, but inexperienced child who saw the obvious, but failed to grasp the nuances of a complex relationship. She nodded to the woman, but she had already walked away, immersed once more in her scientific muse.

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Robert Hastings locked the door of his private quarters and walked over to his small desk. He keyed the holodisplay and waited for the connection to be established. Maryanne's face appeared in two dimensions, floating in the display's 3D space. This time she appeared from the point of view of a handheld comm unit.

"Yes?" Her eyes narrowed as she recognized Robert.

"What was that all about? You embarrassed me in front of our friends."

"Hold on a minute, Robert." Maryanne's image bobbed up and down as she floated to a more private location. Her face

was close to the lens, distorting her image and accentuating her anger. “You know damn well what that was about.”

A knot rose in Robert’s stomach. “What are you saying, honey?”

“Don’t ‘honey’ me, you bastard. How long have you been screwing her?”

Robert blushed. “You can’t be serious...”

“Samina Haddad. You forced me to bring Emile up here so you could be alone with her.”

“We’re just colleagues.”

“Bullshit! She’s your latest fling. Be honest, Robert. You owe me that much.”

Robert took a breath and let it out, his eyes lowering.

“Look at me and tell the truth.”

“Okay. We’ve been seeing each other for a while.”

“Damn, you.”

“I’ll break it off. Honest. I’ll make it up to you.”

“Like hell, you will. You’ve been screwing around ever since we were married.”

“Look, this is neither the time, nor the place for this conversation.”

“There is no other time or place, Robert. So let me be perfectly clear. You are a poor excuse for a husband. You have pretended to be my friend. You seduced me like all the others. It’s pathetic. I trusted you. Damn it, I loved you. And all the while, it was a cruel game, a fantasy. I adored you. I kept myself for you. I made you the center of my life while you wrapped every woman you could find around your penis.” Maryanne’s eyes were devoid of caring, her face a flinty mask. “Go to hell.” She let out a long breath and then slowly lifted her chin. Her back straightened, a power coursing through her. “I won’t love you anymore.”

The holodisplay darkened, Maryanne’s image dissolving away. Robert sucked in a breath, surprised by how guilty he felt. She was right. He had shattered his marriage and pierced his soul with the broken shards.

* * *

Hunter summoned everyone to the common area an hour later. Maryanne floated in the large holodisplay. Her face was

more ashen than before, fear's blade scribing its track on her features. "Something's happening to Val."

Adrianna stepped to her husband's side. "What is it?"

"I, I'm here, Adrianna." Val's voice was still a whisper, but now it shook with apprehension. Panic lay just beneath the surface. "My helmet is clouding up. I can't see anything."

"Is it on the inside of the helmet?"

"No." Val caught her breath. Everyone could hear her gasping through the audio link. "Something is eroding the outside of my faceplate." There was silence in the common area. Even Alexis stopped her wandering and attended to the screen. Their colleague's breathing was like a ticking clock, measuring the long moments. "I've got an alarm!" Val's breathing accelerated. "Multiple alarms! Suit systems are shutting down."

Adrianna squeezed Hunter's arm tightly. "Is the lab air breathable?" Immediately she realized the futility of her question. The nanomachines were multiplying. The suit wasn't protecting Val from unbreathable air; it was shielding her from the ravenous nanomachines. The tiny predators were eating through her protective barrier and Val was the next course in their endless meal.

"The Lord is my shepherd..." Val's voice shook as she teetered on the edge of hysteria. "He leads me beside the still waters..." The pitch of her voice was rising. She was losing her grip. "Yea, though I walk through the valley of death..." Val was too scared to scream. She grunted. Then there was an inhuman sound. A primal gurgling, then a chattering whine. Finally, with her last ounce of courage, she swore. "Fuck! Here they come..." Then it was silent.

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"Get us out of here!" Maryanne was screaming through the holodisplay. "Come up here before it's too late!"

Arvid Benson tried to calm Maryanne as Hunter and the rest of the NARI team stood in a paralytic trance. Emile didn't know what was happening. Fear swept over him as he watched his mother screaming and pleading for rescue. He started to cry, his tears floating away from him as tiny spheres. Arvid looked at them pleadingly. "The lab airlock is still sealed. We aren't

contaminated yet. We can meet you at the main airlock. Five minutes. It'll only take five minutes. Please send a jumpship!"

A mental darkness descended over Hunter's mind. Time dilated, as if the breach had torn the fabric of reality. He felt everyone's eyes in slow motion. Wondering eyes. Yearning eyes. Pleading eyes. Hopeful eyes. They were all waiting for him and Adrianna to say the magic words that would evaporate the nightmare unfolding before them. It had to be a dream. This was the crucial moment when he would stir in his bed and realize that none of this was real. But he wasn't sleeping and none of this was going away. He rubbed his right index finger with this thumb. He took in a breath, but words wouldn't come. He panicked. Turning to Adrianna, he whispered. "I can't do this."

Adrianna looked deeply into his eyes and gave him a microscopic nod. She turned to the holodisplay. Larson Daniels and his camerawoman had heard the screaming and now floated nervously into view. The camerawoman's attention was drawn to Emile and Maryanne. Adrianna looked at the camerawoman. "What is your name?"

She seemed embarrassed. "Nina."

"That's a good name." Adrianna tried to flash her most disarming smile. "Nina, I'm glad you and Larson can hear this first hand." Maryanne was holding Emile in her arms. She was shaking, the perturbations of her body making the two of them oscillate in the zero-g. Arvid had one arm around her waist and the other looped through a handhold to steady them. Adrianna gestured toward the camera in Nina's hand. "Please turn off your camera."

"Ignore her, Nina." Larson said it like a lion protecting its lair.

"Turn it off."

"I can't do that. We're broadcasting live throughout the inner system."

"Believe me, you don't want to document this."

"Try me, Dr. Logan. The people have a right to know."

"If you insist." Adrianna shook her head. She couldn't stop him. "Here's where we are. You know we had an explosion on the lab deck. Two of my friends were killed in the blast: Dr.

Peter Cushing and Dr. Mattie North. The containment unit we showed you this morning was destroyed and the phase two nanomachines have been released. Dr. Valerie Lopez entered the lab to assess the damage and became the first victim of the machines. They ate through her suit..." Adrianna paused, trying to compose herself. "Ah, they ate through her suit and killed her." Adrianna locked the newscaster in her gaze. "You're next. It's only a matter of time."

Nina looked up from her viewfinder and glanced at Adrianna. She looked over at Larson Daniels. He turned, sensing her change of posture, and made a slicing motion across his neck. "Cut the feed, Nina."

Adrianna waited for Nina to shut down the camera. "Those nanomachines are going to breach the lab deck. We have no way of stopping them. If we dock with Selene Station and save you, we could contaminate the moon. We might destroy everything on the lunar surface."

Maryanne grew calm, her voice quiet, but steady. "You can't risk everyone else's life."

"No, we can't."

Larson Daniels clapped his hands together. "Send up an unmanned jumpship. We could get out of here without risking anyone else. We could stay in orbit until we were sure there was no danger."

"We could do that, but what if you were contaminated and you decided to land the jumpship without authorization? You'd be more deadly than a nuclear bomb."

"So that's it?" He said it sarcastically as his rage began to boil. "We're supposed to sit here and wait to die." He gestured toward Emile. "You're going to let this little boy die?" Daniels glared at Hunter, his eyes blazing. "You staked your reputation on the security of your containment unit!" Hunter looked down at his shoes. "You assured us that you knew what you were doing." Larson paused, but Hunter didn't respond. "Look at me, you spineless coward! Be a man and look at your victim." Hunter looked up, his eyes red, his face pale. "You promised us that this technology could be handled safely, you bastard. Now you've killed us. You're a fucking monster!"

"I'm sorry." Hunter whispered.

“Go to hell!”

Adrianna intervened. “We’re sorry, Larson. There’s nothing we can do to save you.”