

SPINDOWN  
PART 1  
Andy Crawford

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Other titles by Andy Crawford:  
Sailor of the Skysea  
The Pen is Mightier  
Untethered (short story)

For Nina

*2240, Earth Calendar*  
*~3 Earth years since departure of colony ship Aotea from Earth system*  
*~63 cycles (52 Earth years) until arrival at destination, Samwise, a habitable moon of*  
*Abhoth, a gas giant planet orbiting the red dwarf star Gliese 876.*

## CHAPTER 1

Constable Lo spotted the man he was hunting with his head poking out around the corner passageway. “Hey!” he shouted. “Stop!”

The constable was alone, and this passageway of the colony spaceship *Aotea* was empty, aside for a lone whirring DustBot. The fugitive made a snap decision and charged. Surprised, Lo shifted his stance and braced himself.

*Too late.* The fugitive led with his shoulder and sent Lo bouncing off a bulkhead at the end of the passageway. *Earth-bred strength beats these low-gravvers every time.*

“You’re down,” said the fugitive as he scooped up a dropped wearable, eyeing the constable, who remained motionless on the deck. It wasn’t just the difference in gravity from their upbringing — so many Aoteans, even among the constabulary, seemed constitutionally incapable of violence. He stifled a laugh as the little DustBot scooted along and purposefully gave the prone constable a wide berth, obeying its programming — to always stay out of the way of humans — to the letter. Hearing footsteps, the fugitive made a quick scan of the neighboring passageways, located a supply closet, hefted the limp constable, less than half the weight he’d be on Earth, and manhandled him into the cramped space. “You’re still down,” he added before shutting the hatch.

Peering around the next corner of the passageway, the hunted man finally had a moment to breathe. He used the moment to hate. He hated this ship. He hated the low gravity, simulated by rotation, which left him disoriented every morning, his waking body expecting Earth-normal gravity as he rose to his feet. He hated the windowless views, and the endless and featureless passageways, kilometers and kilometers winding underneath the massive cylindrical inner “surface” on which most Aoteans lived. He hated the surface itself — bland structures, a few stories tall, divided by regular and identical walking lanes, and a mirror-like reflection on the other side of the interior cylindrical surface overhead. He hated the false “suns,” massive, fusion-fired lights at each end of the kilometers-long cylinder, progressively lit and dimmed for the progression of every Aotean “day” and “night.” He hated nearly every one of the twenty thousand souls onboard, and he found that, with the barest effort, even those Aoteans he found tolerable could be rather easily swept into that hated pool. And most of all, he hated himself for making the decision to leave Earth and join the crew, and this endless, hellish voyage, in the first place.

The hunted man waited for a bit, watching the sparse foot traffic of the passageway from his corner vantage point, one level below *Aotea*’s interior surface. A shift change was approaching, with an accompanying increase in traffic, down to the scattered watch stations of the machinery spaces below, and back up to the living and recreation spaces on the interior surface. He shook his head at his own luck, for the carelessness of the constable — if the man had just called in his observation, instead of standing there gaping, the hunted man would be cornered by now. He clipped the stolen wearable to his collar, practiced fingers flicking the hard-reset, allowing voice and eye control. With a flick of his eyes he linked it to his own earpiece, setting the volume low, wondering if they knew he could be listening in.

“...witness reported the fugitive seen near Hab 13...”

“... another witness who saw him by aft food service 7...”

“...description put out is too vague; adult male, just under two meters, brown skin, tear in the jumpsuit leg...”

“Lo, report?”

After a pause, the order was repeated.

The fugitive silenced it and chuckled to himself, looking down at his leg. *They handicap themselves*. He had already replaced the torn jumpsuit — thievery was trivial among these people, and in such a culture. A few centuries ago, Aoteans would have been called hippies, or peaceniks, or some other forgotten slur ... no weapons, no surveillance cams, no currency, everything running on mutual trust. Doors and hatches could be locked, but few bothered.

And a single nonconformist could blow up the whole thing. *How can they hope to survive like this?* There would be more nonconformists, undoubtedly. More who cared more for their own whims and desires than the mandates and structures of the routine onboard. And these dupes had no idea how to handle it. They'd learn or die.

It was time to move — dumb as they were, they'd figure out Lo's last known location soon enough. The fugitive easily flowed into the growing traffic of the passageway, exchanging pleasantries with a few Aoteans he recognized just getting off watch. Did they even suspect anything? Why would they? They were on a giant spaceship trillions of kilometers from Earth, with twenty thousand hand-picked pacifists onboard. There hadn't been a single crime worse than petty theft or assault since they departed three Earth-years before. They queued up cordially and climbed the ladderwell to the surface.

And he had another decision to make. Hide or strike?

Not much of a choice to make. Checking his mental topography while he weaved between the structures on the surface of the aft Can, as the cylindrical interior of *Aotea* was commonly known, the hunted man considered his targets. Engineering was too far and would require a pass through the dangerous bottleneck of the Ring at the aft end of the Can. So was Operations, at the forward end. He cringed when he realized the nearest.

*Medical*. Not his first choice, but it was the most logical. Just a few “blocks” away, easily accessible from the surface, and with numerous entrances and exits.

The wide automatic doors of the infirmary, a clean-lined white structure larger than most onboard, were unguarded. A yawning admin tech perked up at the front desk, but the hunted man strode confidently as if he knew exactly where he was going. He rounded the desk, took a lift to the second deck, and headed down the passageway.

He stepped silently, turning away to examine a display when a doctor passed by. The long-term-patient wing was mostly empty, except for a constable seated at the end of the hall at a corner juncture.

*Damn*. There were a dozen doors along the passageway, but it wasn't clear which one the officer, a junior constable named Khan, was watching over. He ducked back behind the corner before she turned toward him. He took the long way around the perimeter of the level — the other passageway leading to the corner was much busier with a handful of outpatient appointments. An idea came to him, and he looked at the time, then turned and headed for the cafeteria.

He carried the tray haphazardly as he strode down the outpatient passageway once again. He passed a laundry cart and grabbed a small towel, tucking it into his belt to look more like an orderly. He looked down and angled the tray to obscure his face, but the constable wasn't paying much attention anyway. *Idiots*. Finally, she perked up when he stopped in front of her, a quizzical expression on her face.

“Which room?”

She looked down at a projection from her wearable. “Isn't it early for lunch?”

He shrugged his shoulders. “Can’t I do a favor for a friend?”

“He’s in room seven, but—”

He didn’t let her finish, lashing out with a free hand and striking her neck.

“Stay down,” he said as she went limp in her seat.

*Idiots.* He put the tray down on her desk, and checking that there was no one else in the long-term passageway, sprinted to room seven.

“That you, Khan?” came the voice as he pushed open the door.

“No, not Khan,” answered the hunted man. The infirmary room was small — barely big enough for the bed and the medical device, snaked with tubes, that surrounded it.

The patient chuckled when he saw who it was. “Did you even break a sweat?”

“I’m afraid not.”

The reclining man sighed. “That’s a shame. I expected better.”

“Sometimes we can’t tell the difference between what we hope for and what we expect.”

The hunted man reached out and took hold of the cluster of fluid lines. “Ready?”

Another sigh and then a nod.

The hunted man pulled abruptly, setting off a cacophony of electronic complaints. He shook his head to himself and snorted. He had also been expecting more from *Aotea’s* constabulary.

Then the alarms started — not the machines, but in the overhead. If he had a lens, the wearable could display directly onto his eyeball. But he didn’t, so he projected the wearable’s display onto the back of his hand — it had an alarm too, just a red pulse, silent since the hunted man had muted it earlier. *Huh.* Maybe they weren’t quite so bad as he thought. He couldn’t help but grin as he sprinted into the passageway. At the next turn he almost crashed into an orderly, who let out an exhausted exclamation.

They were waiting for him at the lift bank. Three constables, two armed with stun sticks. *Finally brought those out...* For a moment he considered fleeing the other way — he was pretty sure there was a ladderwell in the corner of the structure, but he heard footsteps.

So he made another snap decision and charged, at the same time wrapping the towel around his left fist. Once again the constables were caught off guard, almost bumping into each other in their confusion. The first gave an awkward thrust of the stun stick, which he absorbed with his towel-hand, punching sharply with his right into the constable’s ribs. As that one went to the deck with a grunt, the second waded in, swinging the stunner with more vigor. *Not enough.* The fugitive blocked it at the handle with his forearm, turning and striking with an elbow to the chin, and wrenched the stunner free of his grasp as the constable collapsed. The last constable had wisely backed away, yelling into her wearable. *Not far enough.* The hunted man leapt forward, pressed the trigger, and thrust the stunner into her belly, sending her to the deck.

And then the lift doors opened, six constables charged forward, and upon feeling the unfamiliar shock to his skin, the hunted man went limp and was hauled away.

He sat in an uncomfortable chair in the constabulary briefing room, meeting the eyes of each of more than a dozen constables and inspectors. They shook their heads, and a few looked down at their feet.

He stood up. The hatred, at least some of which had been deliberately manufactured in his head, morphed into disapproval.

“That was pathetic. If that was a real VIP instead of DCI Gregorian, he’d be dead by now, thanks to you.” He eyed the deputy chief inspector, Kiro Gregorian, who just a half-hour before had been the “patient” in the infirmary room, and appeared to be hiding a smirk. Constable Khan met his eyes with a sheepish expression and then looked at the deck.

He wanted to rail against the culture of *Aotea*, the idea that non-violence disapproval and discussion could solve everything, that all conflict could be avoided, and the listlessness that

resulted from such ideological devotion. But he held that in. “You’ll have my report by tomorrow, and I expect a written report from each and every one of you as well, on what you observed, and the mistakes you made, and how they can be prevented.”

They were silent.

There were positives, but he kept silent about them. There were other targets aside from Kiro and the two he’d “killed” earlier, and after stumbling for the first few hours, at least they had reacted quickly enough to subdue him following the attack in the hospital. But there shouldn’t have been more than one successful attack.

“Is that clear?”

They responded in unison. “Yes, Chief Inspector!”

Cyrus Konami knew there was more to say. But the chief inspector suspected he was already on thin ice from the higher ups — he’d had to beg and plead and finagle for months before they agreed to his plan for such a large-scale, ship-wide security drill.

“Very well,” said Konami. “Back to your duties.”

He didn’t hate these people, and this ship, and this culture, frustrating as they all were, he decided. *It’s not hate*, he told himself, *just boredom*. And perhaps just a slower adjustment than he thought it would be.

*I’m not a hateful man*, he thought to himself. He even managed to smile and nod to one of the few constables who had demonstrated some aptitude and ingenuity in the drill.

*Just bored. And tired.*

As he left his office for the day, he yawned, even though he wasn’t tired.

## CHAPTER 2

Trillions of miles from Earth, on the largest and most advanced spacecraft ever constructed, a shit filter was clogged. Not “evacuate the people spaces and don HazMat suits!” clogged, but “might cause a slight stench once-in-a-while” clogged.

Data Technician 1<sup>st</sup> Class Theo Muahe sighed as he scanned the display monitors and past the abnormal readings on the console in the cramped Sewage and Water Control station. If he had been claustrophobic, this particular watch would have been a nightmare, but First Muahe was used to the tight quarters in many of *Aotea*'s watch stations and machinery spaces. Numbers for gas partial pressures, particulates, acidity, bacteria, and dozens of other details of the complexities of maintaining the potable water systems for every shower, kitchen, and head for the twenty thousand souls onboard the colony ship *Aotea* danced cleanly over the crystalline display. *Technically, everything's green.* But Muahe wasn't the type to pass off a problem, however minor it might be, to the next watchstander. He looked again at the first few log readings, confirming his suspicions. All the numbers were in the normal ranges, but bacterial and particulate logs had jumped a few ticks, after several hours of nearly identical values.

“Damn shit filters...” he mumbled.

A chirping interrupted his log reading, and Muahe turned his attention to his wearable, projecting it onto his lens. The multi-purpose device displayed a simple alert from the NetBug tracer he had started before reporting for his proficiency Sewage and Water Systems watch. *Shouldn't be full yet,* he thought as he read the alert. The tracer had noted that hard drive 271w, one of thousands of identical data storage drives, was prematurely full. A black spot took his attention for a moment. *Gonna have to re-lens the damn thing.* His heart sped up when he realized there were no spare lenses in the watch station; he'd have to wait until he was back in his quarters. *S'okay, Theo, you can still see it just fine. A little speck is no big deal...* He took a deep breath, recognizing that he sometimes had trouble differentiating between trivial issues and major problems. A half minute of concentration told him that this one was the former.

He shifted his attention back to the Tracer he had started immediately before he took the sewage watch. The data sponge he was tracking down was just the latest nuisance in his primary duty as part of the team that managed the data systems and automated programming of the massive colony ship *Aotea*.

With practiced fingers dancing in the air, DT1 Muahe quickly navigated to the hard drive in question, and found to his surprise that it was mostly empty. “Huh,” he grunted. He queried the NetBug again, and after a few seconds, the tracer returned with the same result as before — hard drive 271w was full. Commands through his wearable simply queried the hard drive's own logs. But the NetBug tracer was much more thorough, actually trawling the quantum-molecular data net itself. *So who's lying? My tracer or the hard drive?* He groaned as he realized he wouldn't be able to go right to sleep when he got off watch; his own nagging sense of duty would compel him to solve this little mystery. His primary responsibility would have to wait, though; as a fully qualified crewmember of *Aotea*, DT1 Muahe was required to periodically stand watch at most of the major ship's systems to maintain proficiency. He returned to the sewage system logs.

“Damn filter clogs,” he grunted. Accumulating debris in the water would occasionally gum up the works of the chemical cleaners that maintained bacterial levels near zero.

“Where's the RoverBot?” he muttered to himself as he scrolled through menus on the console as fast as the eye could follow. The sewage station shared a roving maintenance robot with some of the neighboring systems; minor maintenance like cleaning filters was usually left to the Rover. *Atmospherics plant? Damn it!*

“Voice: get me the Atmo watch.” Unlike most Aoteans, Muahe routinely switched between voice, ocular, and tactile control of his wearable, finding each method to be more useful for different tasks.

“Atmo, MT2 Taki,” answered a musical, feminine voice.

*Taki? Oh yeah, that little MedTech. I like the way her hips move...* DT1 Muahe cleared his throat. “Atmo, Sewage. Where do you have the Rover?”

“With a TechBot. Joint servo broke.”

Jacks-of-all-trades in electronics and delicate machinery, TechBots served as general practitioners and surgeons for other Bots, though it was unusual for a RoverBot to require unscheduled repairs. “How much longer?”

“Hour or two.”

*Goddamnit.* He tried not to let his frustration show through the comms system. “Thanks, Atmo, Sewage out.” Muahe closed the connection and shut his eyes, for some reason feeling a tad more energized. *At least we get off watch at the same time. Maybe she'd like to get a drink or a dip in the Pond...* Then he recalled the anomaly the NetBug found. *Damn.*

The bacterial and particulate readings were still technically within specification, so he was not bound by the regulations to do anything but note it in the logs and mention it to the next person on duty. But nothing was more irritating than relieving a watch only to have to solve a problem the last guy was too lazy to fix. *If only I had a UI today...* Periodically all watchstanders would be accompanied by an Under Instruction watch, usually a youngster still working on their ship's qualification. And this would be an excellent job for a UI — he vaguely recalled that the Sewage qualification card had a Practical Factor requirement for manual clearance of a filter clog. He shook his head unconsciously. *Guess it's all on me, damn it.* He didn't look forward to squeezing his bulky frame into the maintenance crawlway, and dreaded even more the too-snug feeling of the thinsuit and breather he would need to wear to open up the purifiers.

“Might as well get it over with,” he mumbled as he made his way through the cramped passageways, instinctively ducking his head under various pipes and other obstacles for the tall. He was so busy minding the head-level obstructions that he nearly tripped on an insectile DustBot, and cursed at the indignant squeal from the little fist-sized cleaning robot, ubiquitous throughout *Aotea*.

The thinsuit locker was unhelpfully placed next to a bulky suction pump, leaving him little room to actually don it. And to add insult to injury, the breather seal was broken, eliciting an involuntary growl of frustration. He projected onto a bulkhead and navigated to the logs for this locker. It was signed by MRT2 Gustafson, dating about three weeks ago. *Gustafson, damn it!* Every time a breather was used, the regulations said the user had to replace the filter, recharge the tank, and apply a new tamper seal. The seal helpfully turned red if there was any leakage. Cursing, DT1 Muahe hooked the breather up to the pressure test device, only calming slightly when the readout came up clean. *Okay Gustafson, you charged it and put the filter in, so that earns you a reprieve... but if you forget the fucking seal again, the brotherhood of the watch be damned, you're getting reported!*

The maintenance crawlway was even more confined than he remembered; he hadn't had to traverse it for several months. Every step required a contortion — around a pipe, or an electrical box, or a data conduit, or one of hundreds of other components. By the time he reached the purifier lockout space, he was massaging a cramp in his hamstring. As soon as he shut the hatch behind him, he spent a full, luxurious minute stretching his muscles. He pawed through a few choices on the tiny display and temporarily shut off the flow through these filters. It took another minute for the purifier bank to drain with a telltale *glug-glug*. He took a deep breath and thumbed the release for the purifier bank entryway. Under the thinsuit hood, he barely heard the hiss of equalizing pressure as the narrow hatch opened.

He had to get on his knees once again to access the filters, with nothing but a porous grate between him and the innards of each device. *At least this damn breather takes away the stink.* The hatch shut automatically behind him. A small click from somewhere nearby took his attention, but nothing seemed out of place when he glanced around. He disconnected the power for the first machine in the bank and removed the grate, then reached in with a snake-like brush, guiding it through to scour every surface of the interior filter, carefully feeling for any lumps or snags. There was only a hint of dust on the brush head when he pulled it back. *No clog here.* He paused, for barely an instant smelling the fetid odor of the sludge that passed through these filters by the gallon. He took a deep breath as he replaced the grate, but all of a sudden his lungs were on fire. He jerked back involuntarily, slamming his head into the back panel of the next bank of purifiers. Dazed, he tried to stand, gulping the air in great gasps despite the burn. Hand over hand, he tried to pull himself back into the lockout space. *The seal... the fucking seal...* His left arm began to shake uncontrollably. He awkwardly slurred the voice control for an emergency call. "Sewage... purification bank 7. Can't... breathe..." he managed to croak, vision blurring. And the blackness took over.

## CHAPTER 3

Chief Inspector Cyrus Konami prayed for a murder. He shook his head, admonishing himself — perhaps not a murder, but maybe an assault — even a bar-fight, unheard of for Aoteans — or a burglary, a theft... even just some disorderly conduct. From his small, folding bunk he stared at the wearable, still clipped to his shirt, willing it to produce the report of some interesting emergency. Anything to break the monotony of life aboard *Aotea*, especially life as the chief inspector. *Top cop on a ship of twenty thousand souls... and more than three years outside of Earth, just one crime of note.* Only one crime more serious than vandalism. *The Case of the Poisoned Cigar.*

Well, it hadn't really been poisoned; a jilted lover from the Bio lab spiked a batch of fobacco with a fungal strain to which his rival was allergic. The next time the poor guy puffed up on a fresh cigar, his throat started to close up. Luckily, emergency response was lightning fast when all the living space inside *Aotea* consisted of just a few square kilometers. *It wasn't even that hard to solve.* The suspect had confessed after being left alone in the interview room for just an hour.

*Maybe the SNH guys really were onto something, getting rid of Earth media.* Decades before the expedition left the lazy orbit around a medium sized asteroid in the belt, the Society for a New Humanity had laid down specifications for the media that was allowed onboard, even if they couldn't actually enforce those rules until they left the system. Chief among those restricted were those vids and texts believed to glorify aggression or dishonesty. Even the occasional bored teenage vandal couldn't seem to dissemble their way past a rookie cop. But that nagging concern remained — Aoteans might be pretty damn agreeable folks... but what happened when someone misbehaved? Humans were the same everywhere, he was convinced — Lagos and Singapore might be two of the most different cities on Earth, but his time working as a cop in both cities had taught him that people did the same awful shit to each other everywhere. Agreeable and honest as they were, and as technically skilled, he was sure that Aoteans were not ready for the real shit that people could do to each other. Especially with the boredom of a decades-long journey.

A whine shifted his attention. His brindle dog Kostya ambled over and licked his fingers. "You want a treat, I guess," said Konami. "Well, tough. You can't always get what you want." He knew he'd give in later, even though the jenji breed, the only dogs onboard, were famously even-tempered; Kostya's single whine was the extent of her begging. Konami scratched behind her ears and she closed her eyes contentedly, finally strolling over to the waste tray in the corner. He wondered if the amiable canine was his biggest reason to live these days.

"How much can a man sleep?" he muttered to himself and yawned as he rose to his feet. Lately he had been averaging more than ten hours per day; aside from the latest drill, there was rarely more than an hour of work to do at the Constabulary, and he only stood a proficiency watch at a system station once or twice a month. He had taken to volunteering for extra duty shifts, even at the most hated watch-stations like Sewage and Reclamation, just to pass the time. Since he covered someone's watch the previous day his waking time was reversed, and he felt discombobulated — well rested but awake during the ship's night. *Nights, days, months, years... what do those words even mean to us out here?* The only intrinsic rhythm aboard *Aotea* was the rotation amidships to simulate gravity, and this was just about once per minute. The four-kilometer-long, six-hundred-some-odd-meters-in-diameter cylindrical living space, divided in two pieces commonly called the Cans, steadily rotated to produce the centrifugal force that held everything tethered to its inner surface at a little over a third of Earth's gravity. Day and night were simulated by bright lights, a faux sun and moon, at the ends of the Cans. *Will we even*

*stay awake all “day” and sleep all “night” when we arrive?* The length of the day would very slowly increase, throughout their long journey, in order to match the multiple Earth-day-long periods of light and darkness on their new home, the moon called Samwise, which revolved around a gas-giant called Abboth, orbiting a star more than a dozen light years from earth.

Konami had been ecstatic when he got the call five years ago that *Aotea* had reconsidered his application. That excitement was only tamped down when he learned the reason they reconsidered: the first chief inspector had hung herself. There was no explanation, just a terse farewell note. It had certainly seemed suspicious at first, but after five Earth-years on the job, Konami was starting to sympathize. And she had been on the job for ten years during construction and initial settlement. *Though if she really couldn't take it anymore, why not just bow out of the mission?*

The excitement was gone. At the beginning, just the concept of being the first humans to leave the solar system – real pioneers, like no one since the first settlers on Mars – was enough to set his heart beating. Just a few thousand souls in deep space, with nothing but the blackness around them, and if the ship had had windows, nothing to see but the stars. And the dream of a wholly new society, even a wholly new people, to be created at their destination.

But after five years onboard, he still felt like an outsider. Most Aoteans younger than thirty Earth years had spent almost all their lives onboard, and at forty-one, Konami was older than nearly everyone else besides the most senior officers, technicians, and the SNH bigwigs. And now he had fifty-five more years in deep space to look forward to before they reached Samwise. There was a culture here that he still didn't fully understand. It was more than just the tenets and history of the Society for a New Humanity – it was an earnest optimism and belief in not just a better future, but a wholly new future, unlike any society humanity had ever conceived. Try as he might, Konami had never been able to silent his inner cynic; he believed that people were people, and tended to have the same flaws no matter where they were or how they lived.

He tried to look on the bright side. *Ninety-six isn't so old... a few organ replacements, a month of gene therapy, and plenty of time to raise a few kids, play with the grandkids, maybe spend a few decades in retirement.*

It didn't work. *Fifty-five Earth years is a goddamn lifetime — even more than a lifetime, if we go back far enough.* He shook off that train of thought as he showered and put on the roomy blue jumpsuit that served as the working uniform for most of the men and women onboard — only the badge on his breast served to distinguish the Constabulary's uniform from those of his crewmates.

The lack of sky no longer felt disorienting, but looking up and seeing ground, dim as it was in the low lighting of the simulated night, still felt awkward when he was “outside.” On a whim he donned his low-light lenses — feeling a bit silly, since they were fashioned to look just like stylish sun-shades — souvenirs from an Earth stakeout-gone-wrong, years ago. His captain had awarded the goggles to him as compensation for the chronic problems a flash grenade had caused his night vision ever since.

Tiny shapes of ant-like children played ball on a green hundreds of meters above him, defying one's instinctual sense of up and down. Their minuscule shadows, cast by the dimming fusion-fired lights from along the dividing Ring kilometers aft, danced and merged like inkblots. A spider-like presence on the corner of the green could only be a robot, though Konami could not recall the colloquial used for the handful of landscaping robots onboard to maintain the surface fields and parks. *GreenBots? GardenBots?*

Even stranger, at least when he first arrived, was the arcing curve of the surface. There was ground “above” him, but also where the horizon should be in the spinward and anti-spinward directions, gracefully curving “upwards” and around. Forward and aft were the massive

bulkheads and arches of the Ring dividers, separating the forward Can from the forward Operations section of the ship, and the forward Can from the aft Can. He lowered his gaze and meandered onward, taking a circuitous route to loosen his legs.

He stopped for a minute at the wide windows of a kindergarten, one of the few classes with similarly reversed days and nights to accommodate the handful of parents who routinely worked the night shift. Thirty youngsters, no more than five or six years old, played among the padded furniture of the playroom far more gently than Konami's memories of the children in Lagos and Singapore, or his own childhood in New Orleans. Two seized the same toy, and after just seconds of a bewildered tug-of-war, a MOMbot was between them. The furry, vaguely humanoid robot distracted one with tickles and the other with a dexterous one-handed juggling act, the toy in question promptly forgotten. The Bot's cartoon-like countenance gave Konami the willies, but every Aotean who grew up on the huge vessel, including Konami's youngest deputy, adored the MOMbots. Constable Ginsberg even had a habit of periodically visiting one of the older units — Konami had learned that the robots, a decades-old Mercurian model designed to supervise children while their parents were core-mining, were programmed to form deep attachments to children that could last for decades.

He couldn't help but have some pity for the children — all their lives, into their middle age, would be spent on *Aotea*. Was it possible to fully mature in such a limited environment? In such a structured society? They would certainly face challenges, whether on this long journey or on their alien destination. How could a few square kilometers of metal and habitat, and the cult-like strictness of the SNH culture, prepare them for that unknown?

At the cafeteria, Konami tried to respond with more than a grunt to the greetings from others in line; pursed lips and raised eyebrows told him once again that his acting was sub-par. *At least it's pasta day*. He doubled up on carbonara, smiled at the faceless ServiceBot, and took a seat at an empty table. He closed his eyes and tried to clear his mind of everything but anticipation of the food when his wearable chirped to life.

"...purification bank 7... can't breathe..." was all Konami could make out as he grimaced and dropped his fork, and he sprang to his feet, dashing out of the cafeteria and redonning his goggles.

*Who's on Emer this morning?* He voiced a non-emergency call to the watch station. The Emergency dispatch station responded just as he stepped outside, shielding his eyes against the bright white light from the aft end of the ship; his goggles enhanced the gentle moon-like glow of the lighting during ship's night into a blazing beacon.

"Emer, Loesser." *Good, Maria's quick on her feet.* Inspector Maria Loesser was, for all intents and purposes, third in command of the Constabulary after Konami and Deputy Chief Inspector Kiroshi Gregorian.

"Maria, Cy. MedTechs on their way?"

"Affirmative," answered Maria. "Call was from Purification Bank 7."

"Roger, Emer. On my way." *Wait a minute...* Konami tried to recall some of the details of his, frankly, slightly less-than-intensive ship's qualification process. Because of his senior position even as soon as he arrived onboard, he had the distinct impression that his qual watches and qual boards were made easier for him. Nonetheless, he had felt the same distinct surge of pride on being presented with his "star canoe" qualification pin that he imagined all Aoteans felt. For Konami, however, that pride had been short lived, quickly overwhelmed by the boredom and resentment of the long journey.

Nevertheless, he was pleased to find that he actually remembered some technical details of the Sewage and Water systems. "Maria, the Purification banks use hazmat, right?"

"Affirmative. The MedTechs have breathers and thinsuits."

“Roger. Cy out.” *Guess I’ll have to stop by one of the lockers.* He made his way through narrow alleys to a maintenance hatch, doffing his low-light goggles once inside the neutrally lit machinery spaces, and climbed down to the moveway level. As big as *Aotea* was, even the most far-flung watch stations on the Cans were within walking distance. But for emergencies and convenience, rapid fore-aft moving walkways were maintained every hundred meters or so at a lower level. Konami stepped onto one of these and was zipped along to the aft Ring. He nodded a greeting to a technician taking apart an electrical relay next to the moveway.

The moveways were useful for travel along the longitudinal axis, but not around the polar axis. The Rings were ten-meter-long cylinders, one in between the Cans, and one at each end, between the living spaces and the free-floating null-g operations and engineering spaces forward and aft of the Cans — but separated such that they could rotate freely. Aoteans used the Rings to travel both in the spinward/anti-spinward directions, and between the living space and Operations and Engineering, as well as between the two Cans. Konami thumbed his emergency authorization into the Ring callbox and listened to the whirring rumble as it spun up to match the aft Can’s rotation speed. Anyone else currently needing or riding the aft Ring would have to wait, but everyone onboard was long accustomed to such occasional inconveniences. He felt antsy as he stood there waiting — his instincts were telling him he had to *move*.

The Ring locked to the Can with a thunderous *ka-chunk* and the doors slid open. A cheery female automated voice announced “Moveway one two,” and Konami stepped onto the Ring car and took a seat on an overstuffed sofa opposite a sleepy but irritated looking young couple in khaki jumpsuits. *Probably just got relieved from reactor watch.*

Konami shrugged, pointing sheepishly to the badge emblem at his breast. “Sorry folks, got an emergency in Sewage. I’ll just be a moment.” The young woman scowled at the interrupted journey.

“Please strap in now,” directed the automated voice, and Konami snapped the padded straps over his chest. The Ring disengaged loudly and reduced speed, then sped up again and re-engaged to the Can. The rapidly changing “gravity” made Konami’s guts churn, but less so than his last time on a Ring. *Maybe I’m finally an Aotean...* “Moveway zero four” said the voice.

After another short jaunt on the moveway, Konami climbed down two more levels and followed the sound of anxious MedTechs, stopping at a thinsuit locker on the way. Agitated MedTechs were not a good sign. He voiced another call.

“Emer, Loesser.” There was an edge to Maria’s voice.

“Maria, it’s Cy. Report.”

“The purifier lockout space inner hatch — it’s stuck. It won’t budge.”

## CHAPTER 4

*Fuck!* In thinsuit and breather, Konami squeezed himself into the corner of the purifier lockout space, staying out of the way of the weld tech cutting through the inner hatch. *Goddamnit... how long 'til brain death starts again?* He decided not to interrupt the doctor, who was awkwardly huddled with the MedTechs, and Konami recalled that more than five minutes was pushing it. The hiss of five breathers, plus the whine of the welding torch, were loud enough that the doc and MTs were nearly shouting back and forth. Konami projected the time from his wearable. *Seven minutes, almost eight. Heads are gonna roll when we figure out what caused this damn hatch to stick.* Even the hatch-cut had to be delayed; with the inner lockout hatch cut open, there would be no way to clear any potential toxic gases from the purification bank, so they had to rig the length of crawlway outside the space as a sort of extra airlock. Just in case, they stayed in their breathers until they could get a second verification that it was safe.

Konami inhaled sharply through his mask. *If he doesn't make it...* Since his predecessor's suicide, there had not been a single death onboard *Aotea*. There were occasional crises like choking on food, gestational difficulties, some industrial accidents, and even a short-lived fire, but everyone had been reached by the MedTechs and damage control techs within three or four minutes. *Until now. Shit — I might have to tell the family.*

He suddenly had a realization — he was enjoying himself. Somehow this was what he had missed. Konami knew he should feel some sort of shame at this, but the elation remained. He knew it wouldn't last.

"I'm through!" announced the weld tech as he stood up with the big hunk of alloy that used to be the inner hatch. Before he left Earth, Konami would have marveled that the tech lifted it so easily. On Earth, that hatch probably would have been more than fifty kilos; in the reduced "gravity" of *Aotea*, it was more like fifteen. Konami took the hatch from the weld tech so he could clear out the welding gear, and the MedTechs dove through to pull the prone man into the larger space of the lockout.

Konami informed Emer that they had the patient as he watched the practiced hands of the MedTechs. One stripped off the patient's breather and replaced it with a forced oxygen system, while the other checked vital signs and cut open the thinsuit. Konami tapped into the medical voice circuits, and while he didn't understand all the medical jargon, he got the gist that, right now, they were dealing with a dead man. *Just how dead are we talking about?* Some ancient Earth vid flashed in his memory. *"Mostly dead, or all dead?"* Konami understood that their primary focus was to get oxygenated blood to the brain. The MTs had attached a bag of super-oxygenated neutral fluid, while the doctor made a small incision in the chest and connected the defibrillator.

Moments stretched to an eternity, and finally the doctor nodded. "Pulse present," he reported. "Slow but steady."

*If only restarting the brain was that easy...* While the MTs set up their collapsible gurney, Konami called Emer. "Maria, are the constables in position?"

"Affirmative, Chief." Standard procedure would place constables at every junction from Sewage to the infirmary to keep the path clear for the MedTechs and the patient.

*Well done, Maria.* He hadn't even needed to tell her to call the reserve constables.

Konami watched as the medical team maneuvered the casualty out the lockout space and down the cramped passageway. He almost chuckled at the absurdity of a clumsy TrashBot trying to contort itself out of the way of the team, but stifled himself and turned his attention to the scene. *The crime scene. Maybe.* He scowled as he realized part of him wanted this to be a crime, rather than just an accident. But it was more than that, and Konami recognized another feeling in

his gut he hadn't experienced in years. *This was not an accident.* He couldn't place why he had that feeling.

He began to survey the deck where the man had lain but a loud *whoosh* took his attention. *Must be the fans; flushing out the space to clean the air.* He bent down to inspect the inner hatch, but stood up abruptly. "Oh shit!" *Goddamnit, the air itself could be evidence!* He looked around wildly and found a sample flask laying in a corner. Konami quickly snatched it up and unscrewed it, shaking it vigorously before re-screwing it shut. He frowned at the absurdity, holding the flask up to the light, as if toxins could be visible.

"Inspector?"

Konami turned around. He must not have heard the lockout hatch open over the fans. A tall, lean figure in thinsuit and breather stood in the hatchway, wearing the khaki cap of one of *Aotea's* line officer corps. A smaller figure, also with a khaki cap, stood to the side of the first. Most of the men and women onboard wore the working uniform of the staff and support crew, but the officers in charge of the navigation, power, and propulsion systems of the colony ship maintained their own chain of command and wore khaki uniforms when on duty.

"Uh, good morning, Commander." Konami had to pick his brain for a moment to translate the rank insignia, a pair of crossed silver pine boughs.

The officer spoke softly into his wearable and promptly removed his thinsuit and breather. "It's safe now, Inspector."

"Shouldn't we get an analysis first?" Konami responded, momentarily distracted by the feminine shape as the other officer slid out of her thinsuit. *Is that uniform...* he pulled his eyes away when she met his gaze.

The first officer's name and position were now readily visible on the khaki uniform jumpsuit: CRISWELL on his left breast, XO on his right. Criswell waved his hand dismissively. "The fans. It's safe now."

"And Atmo's sample results are clean," added the other officer, a Lieutenant Mattoso.

Konami frowned at his sample flask. *Probably not much left of whatever it was in here.* Konami wanted to tell the XO that they should have waited to flush the space, but he held his tongue. In the formal chain of command, the executive officer only had authority over civil section department heads like Konami in matters concerning operation of *Aotea's* systems, but he thought prudence would be wise in this case. *At least, at first.* Konami had exchanged only a few words with the colony ship's XO in his five years onboard — he recalled a short meeting in his first few months, and he would see him at the periodic department head meetings, but the chief inspector realized that most of what he knew of the ship's second-in-command fell in the category of gossip and rumor. Popular opinion held that the XO was a stern, humorless man who commanded more than a little fear in his subordinates.

Konami shrugged and took off the breather and thinsuit. There was the barest chemical tinge to the scent of the air.

"Bag up Muahe's suit and breather and get them to the lab," ordered CDR Criswell as he bent to examine the partially melted hatchway. Lieutenant Mattoso acknowledged, and Konami realized they were ignoring him.

"XO?" Konami offered, and after a moment, repeated it louder.

"Yes, Inspector?" responded Criswell from a crouch, almost growling.

Konami ignored the tone of the XO's voice and tried not to smirk. "I'd like to go over the scene before we move anything else." *This ought to be good.*

"Inspector, you'll have plenty of time in a few minutes. There were at least two system failures here — the breather and the hatch — and I mean to find out what went wrong."

"Of course. So do I, XO. But please, don't touch anything until my constables and I have looked everything over."

The XO stood up straight, crowding Konami without even taking a step. “I don’t think you understand, Inspector...”

“No, XO. You don’t understand,” Konami cut in quietly. CDR Criswell pulled back in surprise. “Section 5.27.3.a.1 of the Charter: the Chief Inspector will have authority over any possible crime scene unless the location or equipment within must be utilized for vital operations as determined by the Commanding Officer.” Konami was far from an expert on the *Aotea*’s systems, but no one knew the law enforcement procedures of the Charter for a New Humanity Beyond Earth better than him. He studied it for the year-long lead up to his interviews and selection as first alternate, and even in the years afterwards, before he was called up to take the place of the deceased, he recalled most of it. No one but the commanding officer could override Konami at a crime scene.

“‘Possible’ crime scene?” echoed the XO. “What makes you think this was a crime?”

Konami refrained from explaining the feelings a cop might get sometimes. *And as out of practice as I am, I’m not sure if I even trust my gut.* “Like you said, two unprecedented system failures at the same time?”

The XO remained stone-faced and silent for several seconds. “Very well, Chief Inspector. But I expect to be notified of your progress, and the minute you’re done with the scene.”

Konami tried to quash the little schoolboy surge of delight he felt when the XO instructed Lieutenant Mattoso to stay behind as liaison between ship’s force and the Constabulary before he departed. Luckily, the chief inspector was saved from awkward banter by the arrival of two constables.

“The casualty is through to the Ring, Chief,” one reported.

Konami nodded and called Emer, instructing her to have a constable stationed at the Infirmary to wait for news. Konami doubted a single one of his forty-six constables was not awake and busy right now. *Probably for the first time in years.*

Konami turned back to the two nervous-looking constables. “Take it easy, guys. Just remember procedure. Like the drills.” He left out his opinion on their performance in the most recent. On Earth, Konami had despised drills. Now he spent weeks making them as perfect as a murder mystery novel, just to have something to do. “First thing’s first. Moby: logs. Peter: images and prints. Especially in the purifier space. What was he doing in there?” The two constables snapped into action, and Konami made a short call to Emer to make sure more were on their way to, among other things, bag up every loose object in the vicinity for analysis. With the first potential crime scene in years, Konami was sure every one of his constables would be eager to assist.

He found himself awkwardly alone with Lieutenant Mattoso once again; he nervously looked at his shoes for a moment after their eyes met.

“So what now, Inspector?” The officer’s question snapped him back into the present.

*Gotta think like a cop again.* It would be just like exercising a long-dormant muscle. “Now we recreate his steps. Follow me.”

## CHAPTER 5

Beatriz Mattoso followed the chief inspector as he made his way stiffly down the crawlway, looking over his hunched shoulders every few moments to ensure that she was still behind him. *Steel yourself, Bea. You didn't minor in investigation for nothing.* Maybe he was just as nervous at the prospect of death as she was, despite the cycles (she recalled they counted by *years* on Earth, rather than the three hundred-day cycles on *Aotea*) of experience he had. So she had heard, anyway.

But it couldn't be anything but an accident. This wasn't Earth. This was *Aotea*, and everyone onboard was a member of the Society for a New Humanity. It wasn't just the genetic screening – psych tests, background checks, interviews... surely any hints of a capacity for violence would have been finagled out and sent packing.

She had to tamp down her sense of excitement. This was a tragedy, of course, but she felt exhilarated – which led to a wave of shame. It wasn't the way of the SNH to find any positive feeling in death, even in the death of one's enemies. Per the SNH, *there were no enemies*, at least no human ones. The real enemies were those aspects of culture that glorified violence and conflict – the parts the Society had purged.

This exhilaration she felt must be a remnant of that culture – even on Ceres, and with parents that had subscribed to the Society's tenets, she couldn't help but be influenced by the wider culture. It wasn't her fault, she decided. The important thing was that she recognized that it was wrong, and did the right thing. She knew how to do the right thing; that sometimes she had feelings otherwise was merely an obstacle to be overcome.

The sewage control space was already manned by a junior HabTech, who greeted Mattoso and Chief Inspector Konami with a nervous nod. The department chief arrived moments later. HTM Wells was a lanky, angular woman in a rumpled jumpsuit. *XO would send her back to change.* Or maybe not — he didn't seem as stuck on appearance with the bluesuits as he was with her fellow khakis. Inspector Konami started to brief the HTM on the incident, but she interrupted him.

"I already heard the scuttlebutt," said Wells. "DT1 on watch, non-responsive in the purifier lockout space."

"Right," answered Konami. "So what would he be doing there?"

"Purification Bank clean and inspect, which is a periodic task, or clearance of a filter clog." Wells projected a field of numbers on the bulkhead. "Bacterial was a bit high with the last log, so he must have decided to clear it himself. Wish all my watchstanders were as conscientious..."

"Can't the rover clean a filter clog?" asked Mattoso. Konami raised his eyebrows minutely.

"Of course," replied Wells. She reached over the HabTech's shoulder and swiped one of the screens. "RoverBot is in recharge." The HTM tapped the Voice unit.

"Atmo, MT2 Taki."

"Atmo, this is HTM Wells. Did you have the RoverBot busy earlier?"

"Uh, yes it was. Some emergent repair with the TechBot." Mattoso could still hear the machinery white-noise through the Voice channel. "Did something happen to the Sewage watch?"

Konami spoke before Wells could answer. "Atmo, this is the CI. We're conducting an investigation right now, so we can't answer any questions. Thanks for your assistance." He gestured and the HabTech closed the Voice channel. "So the RoverBot was occupied..."

HTM Wells talked them through some technical background for the purification filters as they walked back toward the scene. The discussion went silent at the sounds of an argument in the crawlways around the corner.

“Just tell me what’s going on…” said a short, balding master technician. “I heard that one of my guys was hurt in there.”

“I’m sorry, Master Tech, but the CI ordered us—”

The chief inspector cut in. “That’s okay, Constable.” He thrust out his hand to the master technician. “Chief Inspector Konami.”

“I know who you are,” grunted the master tech, but he took the proffered hand. “Master Data Tech Lopez. Muahe’s one of mine.”

“DT1 Muahe is in Medical right now,” said Konami. “But you can join us, if you like — we’re trying to recreate his most recent activities.”

Mattoso felt an opening. “Master Tech, can you tell us about Muahe’s duties?”

He turned to her with raised eyebrows, as if he didn’t even realize she had been there. “Data systems maintenance, for the most part. There are dozens of possible—”

“Can you pull up his work log?” she interrupted.

DTM Lopez blinked and scowled. “Yes, of course.” He projected a blank screen onto the bulkhead and navigated through it with casual skill. He stared at the screen for a few moments before showing it to the CI and Mattoso. “Just before his watch he was running a NetBug tracer.” Mattoso noted some technical jargon along with references to the NetBug, slang for a class of particularly creative problem-solving programs. “That’s no big deal — a task to track down any anomalies in the data storage systems. Every thirty days.”

“And before that?” she asked.

Fingers danced and swiped through a few more screens. “He was off duty. Before that, a weekly consolidation, a virus drill, a clean—”

“That’s okay, DTM,” said Konami, to Mattoso’s annoyance. But she stayed silent. “Let’s get back to Muahe’s last few minutes before the incident.”

“Incident?” said Lopez. “Don’t you mean accident?”

Konami ignored the question. “So now he would have donned the thinsuit.”

“Right,” said HTM Wells. “Then he would have entered—”

“Shouldn’t we go through the thinsuit procedure?” asked Mattoso. She wasn’t quite sure how it might help, but she recalled the emphasis on thoroughness during her classes on criminal investigation. She hoped her nervousness wasn’t visible; she was wracking her brain for every little detail she could recall from those classes that might give her a veneer of the competence she didn’t feel.

“I don’t think—”

The CI interrupted Wells. “No, that’s a good point. Let’s go through the thinsuit procedure.” He called over a deputy and sent him to the clinic to retrieve Muahe’s thinsuit.

The silence of waiting frazzled Mattoso. “So who was the last one before Muahe to wear the suit?” she asked HTM Wells.

She scanned the logs. “MRT2 Gustafson.”

Mattoso made a note and pretended to lose herself perusing a projection while they waited. It didn’t take long — the CI’s deputy returned after just a few minutes with the thinsuit, bagged as evidence. Konami and his deputy dutifully donned plastic gloves, thumbprinted the evidence log, and opened the bag. HTM Wells reluctantly put on the gloves, and Mattoso stopped herself from grinning as the HTM performed the thinsuit donning procedure, ignoring the gaping holes the MedTechs had cut into the suit to treat the data technician.

Just as Mattoso started to worry that she had insisted on this delay for nothing, HTM Wells paused, frowned, checked a projection, and frowned again.

“What is it?” asked the CI.

“It’s the breather mask,” she answered. “It failed the pressure test.” HTM Wells demonstrated, closing the test device over the mask, activating it, and pointing to the telltale red “failure” light.

They looked at the locker logs again — MRT2 Gustafson had fully annotated the thinsuit logs, including the pressure test, as did DT1 Muahe.

“So that was it...” said Konami. “The mask couldn’t protect him from the toxic gas.”

“Wait a second — the filter’s in, right?” asked Mattoso. “Because Muahe was wearing it, and already installed it. But wouldn’t he test the mask before he puts in the filter? According to procedure?”

DTM Lopez nodded vigorously. “Muahe would follow procedure. Definitely.”

“Actually, you’re right,” answered Wells, pointing out the steps on the posted procedural guide. She removed the breather filter and tested it again, and this time it passed.

“But that doesn’t make sense.” Wells scratched her head. “The filter shouldn’t make a difference — it’s entirely inside the mask.”

The CI was about to speak when he got a call and stepped aside. He returned a moment later with a grim expression. “I’m sorry, Master Tech,” he said, hand on Lopez’s shoulder. “DT1 Muahe is dead.”

## CHAPTER 6

*Aotea*'s Commanding Officer, Captain Lillin Horovitz, was annoyed. The solidly built veteran spacer didn't try to hide it — she drummed her fingers, cleared her throat, and stared down each of the department heads, including Konami, who flinched from her gaze just like everyone else. Her silver hair was unusual onboard — most rejuvenated their follicle cells periodically. He wondered what that said about her personality — the chief inspector did not know the captain very well, despite the recurring department head meetings. When the ship's operational command structure interacted with the civil command structure, in which the constabulary was included, it was usually through the mayor. The few times he'd spoken to her she'd been curt, professional, and entirely unflappable. And notably, she was one of the few onboard in a senior position who didn't make a point to rhetorically kowtow to the Society. Ship scuttlebutt suggested that there were no veteran spacers within the Society when crew decisions were made, and the Captain was one of those few outsiders, just like Konami, brought in to fill experience gaps.

The captain's orange cat, Halifax, echoed her owner's mood, gracefully marching across the meeting table and giving every department head a good stare. The jenji cat's gaze was a bit easier to meet than Captain Horovitz's, and she deigned to let Konami rub her belly.

In contrast to Captain Horovitz's visible vexation, Director-Superintendent Harry Akunle was as positive as ever. The man most Aoteans called "mayor," or "CE" for civil executive, reminded Konami of career politicians on Earth — always smiling, quick to shake hands, quick with a laugh (and with Society pabulum), and reluctant as hell to say anything substantive. Konami knew him well — Mayor Akunle held weekly meetings with each of his department heads, and asked probing questions, even when the Constabulary had little of note to do. And at the end of each meeting, the mayor would slap Konami on the shoulder, praise his work as chief inspector, and say "just remember who we're doing this for, Cy." Konami knew it wasn't sincere, but couldn't help but like the mayor anyway.

They had been waiting long enough that various side conversations, held in whispered tones lest they incur the captain's intimidating gaze, had broken out. Medical Director Madani tapped Konami on the shoulder.

"Did you see the ironball game yesterday?" the lanky doctor asked, louder than Konami would have risked.

He said he saw the highlights.

"I was at the Arena," she bragged with a grin. "Great game — it went to double overtime. You should come with me to the next one."

Konami raised an eyebrow, recalling distantly, now that he thought about it, that she might have flirted with him at the last meeting. He hadn't had a date in months, not that he had put much effort into it. He met the medical department head's eyes for a moment, wondering if he had missed other signals as well. Konami decided that she was attractive, and the decision brought a long-absent feeling of adventurousness. "That sounds nice, doctor."

"Please, call me Ilsa."

"Ilsa." He blinked. "And call me Cy. What time?"

"Two days, evening. I'll send you an invite."

He did his best to smile, and she let out a breathy laugh. Konami cut short his grin when he recalled why they were gathered. *Ah, crap.* Theo Muahe had no family onboard, but according to DTM Lopez, his best friend was a mechanical technician, MCT2 Don Olivier. Second Olivier had been shocked to his core when Konami told him, even trying to call Muahe on his wearable, before breaking down in tears. But Konami tried to let himself feel good for a moment — "If you

don't learn how to compartmentalize the bad shit you see, you won't be a cop for long," his first partner had told him.

Madani furrowed her brow at Konami's expression.

"Sorry," he said. "Rough day."

She nodded. "I know. Our first loss..."

They were interrupted by the arrival of the three popularly called the "Bigwigs." Well into their fifties, the three Sponsors from the Society for a New Humanity were the oldest people onboard, and the only adults actually outside the formal command structure. Nominally, each of them had a day job — Wilson Paramis was a demographer, Mara Ngayabo was a geneticist, and Hamad Maltin was an agro-biotechnologist. But they never stood proficiency watches, and Konami seriously doubted that their department heads gave them any real assignments without their express permission. The fact that Captain Horovitz and Mayor Akunle waited for them to start the meeting was the real proof of their influence onboard *Aotea*. Even Halifax tended to stay away from them, finally lying down imperiously next to the commanding officer.

The Bigwigs made Konami nervous. They had no formal role — in contrast to all other positions onboard, "bigwig" wasn't called out in the Charter. Unlike the director-superintendent, they were not elected by the civil section department heads, and unlike the commanding officer, they didn't serve as one of the operational section department heads and executive officer prior to ascending to command. Each had a formal title of "professor," but nearly everyone just called them the "Bigwigs." They had been onboard since the start of construction, and thanks to gene therapies and organ replacements, the Bigwigs would probably be onboard when *Aotea* reached Samwise. *Nobility*. That's the word that the Bigwigs conjured up — unelected nobility, outside of the struggles and challenges of the rest of society, *outside of the law*. Well, perhaps they were — Konami was thankful he hadn't had to test that. But it was just another thing about the *Aotea* that turned his stomach... he wondered if he could ever feel truly comfortable in such a society.

"Inspector?"

It took Konami a second to realize he was being addressed. Harry usually called him "Cy."

"Inspector?" repeated Mayor Akunle. "The latest with the investigation?"

"Sorry," Konami cleared his throat. "With the help of the Habitability master tech, we're looking into the thinsuit breather and filter." He explained the odd results of the pressure test device.

"So it passed without the filter in, but failed with the filter?" asked the chief engineer, a fussy, wiry commander named Ishi Papka.

Konami answered in the affirmative. "That's what the test device at the scene told us. One of my deputies is confirming the result with the lab guys as we speak."

"Now that we've determined that there was an equipment malfunction," said the XO, "I think we can consider this an operational issue, Captain."

Konami frowned. *A fucking jurisdictional argument...* God, it had been years since he'd had one of those. He almost felt nostalgic.

"No, we're not ready to conclude that yet," answered Captain Horovitz. "We don't know what caused the malfunction."

She paused and Konami jumped in. "And we are coordinating closely with one of the XO's officers, Captain. Lieutenant Mattoso will be involved in every step."

CDR Criswell looked annoyed, but he stayed silent.

The skipper nodded agreement. "Very well. Any other issues before we adjourn?"

A nasal voice spoke up. "It's the signal thing, Captain." Lieutenant Commander Lara Olin, the Comms/Signals officer, spoke nervously.

"Oh no, it's the Klingons!" mumbled the navigator, Commander Rusk, to nervous laughter around the table. The captain's cat jumped at someone's high pitched bark of amusement.

“I know I’ve mentioned it before—”

“Many times before,” was the reply under someone’s breath.

“But my techs aren’t imagining it. We have almost a cycle of these UHF transmissions, and we can’t make—”

Captain Horovitz cut her off with a raised hand. “Keep logging the signals. Report any patterns your team notices.”

*Klingons...* Konami snorted. He wondered if he envied Lieutenant Commander Olin for having a mystery, until he recalled that he had a mystery of his own. *A mystery and a dead man.*

“No one’s been inside, right?” the chief inspector asked the deputy guarding the door to DT1 Muahe’s quarters, inside one of the standard four-story habitation structures on the surface of the aft Can. Konami was perturbed since the data master technician had given him the wrong directions to the deceased’s quarters — aft Can, 3<sup>rd</sup> Rib, *forward* third, when it was aft Can, 3<sup>rd</sup> Rib, *aft* third. He could have easily looked it up himself, of course.

“Right, CI,” answered Junior Inspector Dillon. “I relieved Lee, who reported no one tried to go in since she arrived.”

“Very good. Let’s take a look.” Konami removed the bright yellow vidcam from its case and cleared his throat. Just as he was about to turn it on, the junior inspector’s eyes went wide.

“Nothing to worry about, Deputy. Just a vidcam.”

“But... personal vidcams are banned, right?”

This wasn’t the first time Konami had encountered anxiety over recording devices onboard. “No, just nanocams. And unmanned surveillance cams. But vidcams are allowed as long as they’re not hidden, and they conform to specs.” He tapped the casing above the lens, explaining the minimum size and marking requirements.

*Imagine being scared of a vidcam.* On Earth, of course, they were ubiquitous. Every gadget doubled as a camera, and nigh-invisible nanocams could be purchased by the bucketful, attached to every surface, and continuously upload to the cloud. A restoration of privacy was one of the primary drivers, aside from the desire to eliminate violence, behind the creation of the Society for a New Humanity.

“You okay with this, Deputy? We can get someone else.”

“Yeah, I’m okay. It’s no problem.”

“Good, because you’ll be recording.” Konami handed the fist-sized camera to the junior deputy and showed him how to turn it on. “Get everything, and touch nothing.” Once the red light was blinking, he looked into the lens. “5 May 2240,” he said, and paused. He still thought by the Earth calendar, even though most onboard tracked the three hundred-day cycles since departing from the solar system. “Cycle three, day 261,” he continued, “approximately eight hours since the Emer call for the incident leading to the death of Data Technician First Class Theodore Muahe. We can verify that no one has entered the quarters of the deceased since about one hour after the Emer call.”

Konami opened the door with DT1 Muahe’s key. It was a standard two-room single quarters, and rather than the more common living or sitting area, it was apparent that DT1 Muahe had arranged his front room as a small workshop. *Cluttered would be an understatement.* Muahe had his very own desk computer, something he’d never seen in someone’s quarters before — with a dozen modifications and additions, it was almost as big as those ancient units he recalled from an old 21st-century vid. The computer desk took up a quarter of the workshop, with the rest of the space taken up by computer gear and bot parts in various states of repair. One bot was operating — it looked like a DustBot at first, but it was larger, with a few extra appendages. It ignored the two inspectors while it fussed over a pile of small parts in a corner.

Konami carefully made his way through the mess, gesturing toward various details for Dillon to record. The bedroom was Spartan, the bunk unmade and slightly sour-smelling. *Antisocial tinkerer? Lonely nerd? Quirky inventor?* Konami tried to tamp down on his own speculation before everything could be analyzed. Satisfied that the vidcam had captured anything in the quarters that might possibly be useful, he had Dillon shut it off and made a call to Emer.

“Emer, Floros.”

“Floros, it’s Cy. We finished recording in Muahe’s quarters. Detail the baggers — apprentices are fine. Dillon will stay behind and supervise.” Konami noted a grin passing on the junior inspector’s face. “You okay with that, Inspector?”

“Absolutely, CI. We’ll bag and tag everything, clean as the black.”

Konami nodded as he departed. He knew “the black” referred to the clean vacuum of space, but for some reason, the reference made Konami think of a different kind of darkness.

## CHAPTER 7

Mattoso used to hate waiting, but cycles into a half-lifetime-long journey had cured her of her impatience. At least, that's what she thought — now that she was actually waiting for something as important as this, her predilections returned with a vengeance. The diagnostic techs were positively gleeful — she reckoned this was probably the first time they had to investigate a malfunction more severe than a squeaky hinge. At least their enthusiasm was a tiny bit infectious; they explained the workings of the molecular scanner with real zeal, even while waiting for the minute lenses to complete their nigh-undetectable, and seemingly endless, movements across the surface of the faulty breather filter.

She realized she was nigh-buzzing with energy. *An actual murder!* It should be terrible — and she recognized intellectually that it was terrible — but she was as excited as she'd been in cycles. *Well, maybe a murder.* Maybe it would just be an accident. That felt disappointing to contemplate, which made her feel a momentary wave of shame.

Mattoso checked a message on her wearable — her girlfriend/boyfriend (Pat alternated which term they preferred) complained about their kids and promised fresh vat-grown duck breasts for dinner. She smiled, well aware that they adored teaching, and especially adored the children in their class.

A bell rang, setting the lab techs back in motion. Chief Chari frowned as she passed — Mattoso had had to pull rank in order to remain in the little diagnostics lab while the techs worked, and the DGT chief had not been pleased. After a two-minute huddle, Chari approached her.

“It was the edge of the filter, Lieutenant,” she said gruffly. “There was enough scoring along one side that it didn't seal properly when fully installed.” Chari pointed out the scoring on an imager. “Normally it wouldn't matter, but this one stuck out a few extra microns — enough to sort of stick between the connection.”

She asked about possible causes.

The diagnostics chief shrugged. “Normal wear and tear, a fab error, who knows?”

Mattoso subvocalized, making a note, and saving the images from the scanner. *Can't be a fab error, can it, if this filter was used before?* But she recalled that, according to procedure (and according to the breather unit logs), breather filters were only used once and replaced. *Then that might argue against wear and tear, right?*

Her wearable vibrated — a call from the chief inspector. The department head meeting had completed. She updated him on the results from the lab. “What's the next step, CI?” she added. “Cy, please. Next step is interviews.”

Konami beat her to MRT2 Gustafson's hab, one of a sixteen identical units in a standard Hab near the central Ring. She was pleased to find him waiting in the passageway, examining the ministrations of the blocky TrashBot as it cleaned the edges of the walkway — she had been worried he would go ahead and start the interview without her.

She wasn't quite sure what to make of the Chief Inspector. Earthers made her feel just a bit nervous, but she knew that wasn't quite fair. Yes, the problem of violence and aggression throughout the solar system was inherited from Earth's history, but all the teachings of the SNH abhorred any sort of bigotries based on categories like place of origin. He struck her as competent, and his reasoning for the recent drills made logical sense... but just the knowledge that someone onboard was capable of the assaults, even in a drill, she'd read about in the aftermath reports, gave her the willies. Now why would that creep her out, but the prospect of investigating a murder did the opposite?

She asked about the autopsy – there was nothing surprising, just asphyxiation and toxicity from the gas mixture.

She was annoyed that she had to ask, and he apologized and promised to keep her informed.

Gustafson turned out to be a prematurely balding young man in a sleeveless shirt and shorts. “Uh, who are you?” he grunted while a shirtless youth gestured in the air, a cluster of wearables arranged around his head. A yellow jenji dog sniffed the visitors’ feet before returning to the food dispenser.

Gustafson’s eyes went wide when Konami introduced them. They ignored the triumphant shout from the vidgame player.

Konami met Mattoso’s eyes and tilted his head toward the young tech, suppressing a yawn. She swallowed her surprise. *He’s telling me to lead the interview!* “According to the breather logs, Second Gustafson, you were the last one to use the thinsuit and breather before the deceased.”

“Breather?” The tech scratched his neck. “Guess I was on watch, and had to go into a hazspace.”

A pause, and Konami broke the silence. “Mr. Gustafson. Try to think back. We can pull up your watch records if it would help.”

*Damn it, Bea.* She was annoyed at herself for waiting too long and allowing Konami to take the lead again.

“No, that’s okay,” the tech answered Konami. “Let me think for a minute... Sewage, right? Yeah, I have to stand Sewage every quarter-cycle, I think, for proficiency — yeah, I remember. Purifier clean and inspect — a bi-cyclical, or tri-cyclical, or something. Big pain in the ass — nearly took all watch... the offgoing should’ve started it, but—”

“Please, Second, the breather?” interrupted Mattoso. She chided herself for checking to see if Konami approved. *Doesn’t matter, Bea. It’s not like he’s your boss.*

“Yeah, the breather. What’s to tell? I followed procedure, donned the thinsuit and breather, scrubbed down the crap on the purifier, and doffed it.”

“Can you remember donning it?” asked Konami.

“I don’t know, I just put it on.”

“Do you remember any problems with the breather?”

“No, it worked fine.”

“How about doffing it?”

The second just grunted. “I just took it off. What’s—”

Konami scrolled down a projection. “Did you replace the filter?”

“Uh... yeah, of course. That’s procedure.”

“And then...?”

“Then? Oh, then I put on a new seal. No wait — the seal is last. I recharged the tank, then the new seal. Then I thumbsigned the logs, of course.”

Mattoso was impressed — she wasn’t sure if she could recite the procedure from memory without consulting the posted info plate. *But then, I don’t have to stand Sewage watch.* As an Operational officer, the closest she might come would be the Machinery Control watch, supervising all of the various non-vital machinery systems watches onboard from the Machinery Control Room.

“Okay, Second. Thank you for your cooperation.” He turned to her, but she didn’t have any more questions. “We’ll let you know if we have any more questions, Mr. Gustafson. Don’t leave town.”

They left the young tech with a confused look on his face.

““Don’t leave town?”” she asked Konami.

“Sorry,” he chuckled. “Earth joke.”

They made their way to the Central Ring in silence. “Do you miss it?” she asked while they waited for the Ring. “Earth?”

Konami looked at the deck. “I miss the sky. I miss seeing... nothing.” He pointed upwards. “You look up on *Aotea*, you just see the other side of the Can. On earth, you look up — you might see clouds, or the moon, or the sun... But every so often, and especially at night, you see nothing. Emptiness. Not even stars, unless you’re outside the city, though I miss those too. In Lagos, it was like a grey blanket over the city.” He laughed. “A warm, grey, reeking blanket.” *Doesn’t sound like something worth missing.*

Mattoso considered this. “I’ve never seen sky before, except through a window.” She honestly wasn’t even sure if the empty black vacuum of Ceres’ surface counted as “sky.”

Konami raised his eyebrows. “Really? Where are you from?”

“Ceres City. One of the exurbs, actually. We took a tube into town for school.”

“Exurbs?” chuckled Konami. “I thought Ceres City was all there was.”

She was too far from home to be offended. Few that hadn’t grown up in the asteroid belt knew much about the solar system’s largest asteroid. “There’s New Hawking, on the south pole, and Mahatma, on the equator, and—” She stopped herself as felt a twinge of homesickness. “It’s as big as India, you know. Ceres, I mean. It’s not so small.” She knew nothing about India aside from its status as a large land region on Earth, but ever Cerean student learned that their home was approximately the same size. “So just the sky? Anything else?”

“The dogs. Maybe I miss the dogs.”

“The dogs?”

“Yeah. On *Aotea* all the dogs look alike. Jenji dogs and cats are all the same, except for the colors, and they all have the same personality. They’re great, but in Lagos there were dogs that looked like wolves, and dogs that looked like rats, and everything in between. My neighbor had a big yard and a dozen dogs, and I used to watch them play with her children. And not just dogs — monkeys, antelope, squirrels, and birds — oh, the birds are beautiful—”

They were interrupted by a chirp from Konami’s wearable as they stepped onto the Ring. With effort, Mattoso managed to refrain from eavesdropping. The conversation was short.

“They found the hatch malfunction,” said Konami.

“Really? What was it.”

“Just an interlock short. You know, the inner door can’t open unless the outer door was shut, with both doors failing shut. Truly ancient technology, say the techs.”

“Tried and true, the engineers often say,” she replied. “The fewer moving parts, the fewer things that can go wrong.”

“Maybe that wasn’t the best philosophy in this case.”

Considering the result, she couldn’t argue with that.

## CHAPTER 8

The funeral was brief and surprisingly moving. DT1 Muahe's closest friends and colleagues gave speeches, mostly improvised, it seemed, praising his unfailing loyalty and commitment to his duties, as well as his sense of humor. A young data technician, weeping softly, was gently urged by his compatriots to make a speech, but refused. They were gathered at the small park next to the reclamatorium, recorded dutifully by the colony ship's lone journalist, Elena Conneer.

The park was overflowing — Konami doubted more than a few dozen of the mourners knew Muahe particularly well, but the shock or novelty of the first funeral onboard since departure proved to be a draw for many Aoteans. His eyes roved the crowd, looking for some sort of unusual reaction or clue, but the only faces without expressions of sadness or shock were those of the Bigwigs. The stout, jovial Wilson Paramis had managed to tamp down his typically broad smile to a tight-lipped grin, occasionally mopping his brow, while Hamad Maltin and Mara Ngayabo were as expressionless as Bots.

A senior solacer by the name of Lumbee gave a warm eulogy, placing extra emphasis on the importance of a positive attitude for the survivors, and all Aoteans in general. "Mourn well," she said. "But do not only mourn. Celebrate Theo's life, and emulate his dutifulness and compassion. And remember that he, or someone with identical DNA, will live again among us someday soon." Among the many provisions of the Charter was a promise that, should one pass away during the journey by any cause other than genetic illness, one's DNA will move to the "top of the line" of the reproduction queue. The next time an Aotean couple was authorized to have a child, Muahe's genetic code would have a high likelihood of being selected over the millions of genetic contributions from people all over the Solar System that were stored in *Aotea's* genebanks.

A genetics technician took a ceremonial last sample — in actuality unnecessary, since the banks already had frozen tissue samples from every Aotean — and Muahe's remains were placed gently in the reclamator pod. A hymn was sung — something about the peace a New Humanity would bring — and the crowd broke up.

As he made his way back to his quarters, Konami subvocalized, "News." He was wearing a lens, so hovering in front of him, the top headline read "HIDDEN SPACES OF AOTEAN REVEALED." He chuckled as he swiped through the latest article on *Aotea Today*, Conneer's daily periodical. Her piece was complete with images and vids of empty storage and machinery compartments, with ominously low lighting, as though it wasn't trivially easy to bring a sack of fist-sized lamps that could illuminate the largest spaces onboard. *Poor Conneer*. If his job was boring, Conneer had to manufacture something interesting to write about every single day.

A chirp signaled an incoming call.

"CI Konami," he answered.

There was a pause. "Uh, sorry to bother you sir," said a wobbly male voice. "It's MRT2 Gustafson; you were by my place earlier."

"What can I do for you, Second?"

"Um... I'm sending you these texts I got. I, uh, don't think it's right. I didn't do anything wrong."

Gustafson tersely ended the call and Konami slid through several screens, idly scratching Kostya's belly. There were seven messages forwarded from the 2<sup>nd</sup> class tech, all from anonymous accounts. *You've failed us*. read the first. The second read *His death is on you*. The other five were all variations on the same sentiment.

He shook his head. *How did this get out so goddamn quick?* He thought back to his time in Lagos and Singapore — no one cared about the petty crime of the day, but if a celebrity was involved or if it was a sex-related crime then there was always a leak. *People are people everywhere, I guess, on Earth or in interstellar space.* And it made sense that, onboard *Aotea*, any possible murderer would be a celebrity.

But the voice messages... they were so tame to be laughable. On Earth, it would have been death threats. On *Aotea*, you get shamed. And the funniest, or saddest, part, is that *it worked*. Shame rolled through the wearable speakers, clear as if the tech had been in the room. *Only on Aotea!*

A whine distracted him for a moment — Kostya realized Konami was apparently occupied with other thoughts, and stood by the food tray which remained frustratingly empty.

Konami thought back to Earth procedures as he filled Kostya's tray with kibble. *What did we do when a rumor gets out, and someone starts getting threats?*

The ball came in low and Konami just barely caught it on his racket with a backhand swing. "What's the latest?" asked Konami's deputy chief inspector, making an improbable leap to return the racketball. Kiroshi Gregorian was short, wiry, and a few years older than Konami. He had more experience in law enforcement than the chief inspector, but all of it was in the smaller settlements of Mars. Konami had learned that the captain and mayor both had wanted a big city cop to head up the constabulary, and the only truly big cities were on Earth. The affable deputy CI didn't seem to mind — a big part of the reason Konami counted him as his best friend onboard. And Konami planned on supporting Gregorian at the six-cycle point for the next department head rotation — per the Charter, departments could rotate their leaders every six cycles between the senior members of each department to balance experience and reward service. Konami figured that by then he would be happy to take a break from leadership. When he really thought about it, he'd happily relinquish his position much sooner than that.

"What do you care, you damn layabout?" replied Konami, trying to manufacture the camaraderie that seemed so hard to find lately. Just before the recent drill, Gregorian had returned from a week-long respite at the Beach, as the walled-off leisure zone, tucked against the aft Ring, was known.

The older man chuckled as he hit a winner into the bottom corner of the back wall. "You know the key to vacation on this tub, Cy?" Gregorian's next serve was a surprise — high and wide.

"What's that?" Konami grunted as he backpedaled to return the ball. Even with a less elastic ball, *Aotea's* racketball courts had to be a bit longer than on Earth due to the substantially lower gravity.

"Don't go very often. There's not much at the Beach — just the jet-pools, the widescreens, the games, and the top-shelf food and booze. Keep it to once every cycle or two, and it's a nice break. More often than that, and it'll bore you out of your skull."

Konami took advantage of a gift serve from Gregorian and won the point. He lined up a solid serve to the back corner. "How about the other vacationers?"

His best friend returned it easily, sending Konami diving to keep the ball in play. "I'll just say the timing was lucky, my friend. Even though I had to cut it short."

"No details?"

"You know what they say, Cy. What happens at the Beach..."

*...stays at the Beach.* Konami realized that he hadn't actually taken a break for over a year. In fact, if it hadn't been for Muahe, he might be packing up for a break as soon as Gregorian got back.

"You gonna serve, boss?"

“Yeah, sorry.” Konami gave a half-hearted serve which was promptly drilled into the corner. *Crap again.* He almost never beat Gregorian at racketball — despite Konami’s relative youth and longer reach, his second-in-command had some special sense of where the ball would be at any given moment. *Maybe ’cause the gravity on Mars is almost identical to Aotea’s, and I grew up playing racketball on Earth.* If he wanted any chance to win now, he’d have to stay more focused. *Or maybe I can distract him.* “What have you heard so far?”

“Maria gave me an outline. Dead data tech, hatch malfunction, mask malfunction, etc. An MRT2 screwed up the suit records. What else you got?”

Cursing, Konami missed an easy shot. “How’d you hear about Gustafson?”

“The MRT2? Wasn’t he in the report?”

Konami thought that was in the detailed report that hadn’t been finalized, not the initial bare-bones report, but he couldn’t recall exactly.

He missed another shot. He needed something to turn the game around, so he told the story of Muahe’s death but kept the details vague at first, timing his shots as he answered Gregorian’s questions. It earned him two points.

But his opponent caught on quickly, apparently, and stopped before taking the next serve. “Okay, Cy, nice try,” he chuckled. “Two minute break. Just lay it on me.”

*Damn... I was just about to take the lead.* He finished the story.

“Two malfunctions at the same time?” Gregorian shook his head. “Sounds like quite a coincidence.”

Konami grunted his agreement.

“So what do you think about Gustafson? Did he botch the procedure?” Gregorian lined up his next serve.

Konami had been pondering this since the unfortunate Second called him. “I don’t know. Maybe by accident. I don’t get any... you know, *squicky* feeling from him.” The serve whizzed by his head. *My turn to be distracted.*

“Yeah, yeah,” answered Gregorian. “Simplest answer’s usually the best, right? But I dunno. Shit, it’s like exercising a dormant muscle.”

Konami chuckled, surprised for a moment that it came naturally. “Maybe we oughta watch those old cop vids — the ones with the murder and the bang-bang and the explosions and the misogyny? They always talked about instinct and gut feeling.”

Gregorian pursed his lips. “Watch out, Cy. We all signed the Charter.”

“Of course. Only joking.” And as soon as it came, the amusement was gone. On Earth Konami had never been particularly attached to the sorts of mindless, bloody entertainment that the Society for a New Humanity banned as both a cause and symptom of Earth culture’s inherent violence, but after a few years of nature documentaries and the all-smiles pseudo-propaganda vids the Aotea Players produced, he missed it. “Never liked that crap anyway.”

Gregorian laughed. “Right, Cy. Right.”

Konami tried to focus on the game, but it didn’t matter — Gregorian was just a step above him in skill, or at least in familiarity with low-g racketball. He matched Konami’s hardest shots and returned them even harder. Maybe when he was younger, Konami’s athletic ability and long legs would keep him in the game, but not today. With one more serve just out of his reach, it was over.

“I want you to supervise something a little unusual,” said Konami as they walked to the changing room.

“What’s that? Punishment for kicking your ass?” Gregorian laughed.

*Ha ha.* “Call it that if you like. Activate the reserves — alpha-level — for now.” It was a relief to give the order — like calling in the cavalry. Normally, the Constabulary only had two personnel on watch at any given time — one on patrol, and one at the Emer station. The reserve

watchbill consisted of multiple constables that could be at leisure, as long as they were awake and dressed and wearing their wearables. ‘Alpha’ was the lowest activation level, bumping two reserve constables up to the active watchbill. “One more on patrol, and one watching the hab building of Second Gustafson.”

“Roger, Chief,” replied the Deputy Chief Inspector. “General surveillance?”

“Yeah. He’s been getting messages. Nothing that serious so far, but I want to catch any property vandals in the act.”

“Wow,” said Gregorian as he towed off. “I’ll get right on it.” The deputy chief inspector changed the subject. “You know what the talk was at the Beach?”

“What’s that?”

“Those ghost signals. There was this comms tech — CM1 Dor...” Gregorian cut himself off with a grin. “Well, you don’t need to know her name. But she said these UHF signals were all over the place. They’d be there one second and gone the next, but there were just a few patterns of the burst, all related.”

Konami recalled the mockery of Lieutenant Commander Olin over the signals at the department head meeting. “Odd stuff. What do they think is causing it?”

“They have no idea, but a couple of the techs think it’s aliens. That we’re being followed, or shadowed — the signal source vector changes over time.”

“Have we responded?”

Gregorian lowered his voice. “She wouldn’t say for sure, but she hinted that the comms techs have free reign to send any signals they want.”

“Nothing in the Charter about aliens, after all,” answered Konami. His memory of the non-law-enforcement parts of the Charter was less than perfect, but he was confident it didn’t discuss extraterrestrials.

He was far less confident that it was wise for bored comms techs to be sending signals out to possible non-human lifeforms, however.

## CHAPTER 9

“It was a one-in-a-million fluke, according to the electronics techs,” Mattoso explained to the executive officer, holding up a small and shiny sliver of metal. Commander Criswell’s office, beneath the command bridge, was Spartan and functional, like the XO himself. He even had his own DustBot clinging magnetically to the wall, programmed to remain in his office and keep it spotless, unlike most of the thousands of little robots that could roam nearly everywhere onboard there might be dirt. In the operational and engineering spaces forward and aft of the ever-rotating Cans, gravity was not quite null due to the constant small acceleration of the *Aotea*’s propulsion drive, but it was close enough to feel like zero-g. She pushed gently against the fixed desk with her feet to prevent herself from drifting to meet the executive officer, explaining the source of the metallic shard. She handed the XO the culprit. “So that’s quite a coincidence — this shard shorts the circuit at the same time—”

Commander Criswell cut her off, somehow appearing to be standing steady despite the lack of gravity. “Sometimes coincidences actually happen. And maybe not that much of a coincidence, if the rumors about Second Gustafson are true.”

*You should know better than to listen to rumors, XO.* But she kept her mouth shut.

After a couple of years onboard, she was finally used to the XO’s personality. But it had taken a while. The Societans on Ceres had won her over with their warmth and kindness – the promise that a new humanity wouldn’t just be free from violence, but free from conflict of any kind. That freed from the shackles of Earth culture, by our very nature humans would want nothing more than to love, be loved, create, and recreate.

That might have been a childish hope, but it was effective. And while her joy in joining the crew of the *Aotea* was still as high as it ever was, she understood now that it was much broader than that childish sales pitch. She’d come to understand and respect that there was indeed more to natural human inclinations than love and pleasure and joy, and that communities needed more rigid personalities like the XO just as much as it needed those like the neo-hedonists of the Cerean Societans.

“The chief inspector is still conducting his investigation,” was all she said.

“Now we know the cause. Tell that to the chief inspector — he can wrap up his investigation, but it should be soon.”

*But what caused it to fall and short the circuit?* “Aye, sir,” was all she said, and she was dismissed.

Someone was waiting for her in the passageway outside her quarters. The woman’s face was familiar, but it took Mattoso a few seconds to place it — the face at the bottom of every issue of *Aotea Today*.

“Elena Conneer,” she said.

The journalist oozed energy, even as she stood. The muscular little woman thrust a vidcam forward, a pulsing red light signaling that the device was recording. “Lieutenant Mattoso, what’s the latest on the investigation into First Muahe’s death? Did Second Gustafson’s negligence lead to his death?”

Mattoso took a deep breath. *Damn cameras.* Escaping the near constant video surveillance of Earth, whether by public or private forces, was a significant part of the Society for a New Humanity’s Charter. The ubiquitous wearables didn’t even have the capacity to record video without modification.

“I can’t comment on an ongoing investigation.” *You know that, Elena, even if you’re out of practice.*

The journalist switched off the camera and smiled, the tense energy in her gymnast's build seeming to evaporate. "I know, Lieutenant. Just need to have some sort of vid in the article — 'no comment' is par for the course for a murder investigation."

Mattoso chuckled. "Okay... wait, murder? Who told you this was a murder investigation?"

Conneer just widened her crocodile grin.

"It's not," Mattoso added. "Well, maybe... no comment. Just no comment." *Guess I'm out of practice too.*

"Thank you very much, Lieutenant. You've been very helpful." The journalist finally stopped smiling and walked away.

Mattoso shook her head to herself. *Nice going.* At least Conneer hadn't recorded Mattoso's verbal misstep.

She was startled upon entering her quarters to be wrapped up in wiry, strong arms. "I've been waiting for this all day..." Mattoso silenced Pat's husky voice with her own lips.

"How long've you been waiting?" said Mattoso, finally pulling away.

"Hours. Cycles." Mattoso's companion pulled her in for another kiss. "But I have a qual watch in an hour."

"Then we gotta be quick..."

She signed contentedly after Pat left. She had that urge to lie in bed forever, but motivated herself to arise and change into off-duty duds. Her door chimed — it was Konami. She caught his eyes darting for the barest moment to her chest.

"I just wanted to give you the latest news."

She invited him in and offered him a drink.

"No, thank you," he responded, clearing his throat. "Let me get to the point — Second Gustafson called me. Rumors have already spread. Nothing major, but he's been getting anonymous emails."

For a moment she was shocked. Not by the rumors, but by the emails. Aoteans were the cream of the human crop in terms of rational thinking and emotional control, based on the geneset requirements for potential colonists. The millions of individual genomes submitted alongside the submission fees — a substantial part of the funding of *Aotea*'s construction in the decades prior to launch — were weeded down to the twenty thousand applicants with the right combination of skills, experience, diversity, personality, and genetic tendencies toward health, advantageous behaviors, and other concerns. The ones that didn't make the cut, but were close, were saved for the sake of genetic diversity — new generations would be largely built off these saved genesets. *And all it takes for network vandalism and threats is the death of a crewmate?*

"We should assign someone to look out for him. Can your watchbill support?" she asked, finally.

"Taken care of."

"How about the messages? Can we track down who sent them?"

Konami shook his head. "Maybe, though we'd need the cooperation of the data techs. But none of the messages were direct threats — they wouldn't violate the Charter, even if we knew who sent them."

"So what's the latest from the labs?" he asked.

She filled him in on the shard of metal that short circuited the hatch interlock. And she forced herself to tell him about Conneer's "interview" — she didn't want it to be a surprise if he saw the vid on the next issue.

At the mention of the XO's request, Konami laughed. "You can't rush an investigation. Didn't you learn that in class?"

"Of course," she replied. *Please don't lecture me, CI.*

“Tell the XO next time you see him, that it’ll be done when it’s done.”

## CHAPTER 10

A cheer rippled through the Arena, loud enough to interrupt their conversation despite the sparse attendance. Not that the attendance was surprising, considering that the Arena had nearly enough seating for the entire population of *Aotea*.

“Did you see that?” asked Medical Director Ilsa Madani. “Smooth!”

“Smooth indeed!” said Konami with genuine wonder. He was enjoying himself far more than he’d expected. It had been a while since he’d done anything that could credibly be described as “fun”.

“Shame that Eng is so far ahead that it probably won’t matter,” responded Madani.

He agreed. The engineering department’s team dominated the ship’s ironball league most seasons, and this one seemed no different. Most departments, like Konami’s constabulary, were too small to form their own team, so they joined up with another department or two. Engineer’s current opponent, Fab-Supp, was made up of players from the fabrication and supply departments. Only two of Konami’s constables were interested and talented enough to play ironball, so they joined the human resources and administration departments’ team. Konami recalled that it was rare for them to win a single game. He thought he ought to try and attend more games — or at least the games in which Maria and Owen played. *Gotta support my deputies, even if they barely see the field.*

He asked her about Medical’s team.

Madani gave the so-so gesture with her hand, explaining that they joined with the Science department, with middling success.

The buzzer sounded for the final break between periods.

He thanked her for inviting him.

“It’s my pleasure,” she replied. Madani spoke again just before Konami worried the silence was becoming awkward. “What do you think it’s going to be like? Samwise? I mean, a whole new world. And the first world we’ve seen, besides Earth, with an atmosphere to support life. At least some sort of life.”

“We’ll need oxygen masks, right?”

She explained that the gas mixture on Samwise wasn’t quite right, but that the geneticists were working on modifying the human genome to better adapt.

Konami successfully kept his eyes from glazing over at the technical details and nodded. “As to what it will be like, I suppose that will depend on what we make of it,” said Konami. He thought for a minute. “It will be big.”

“Big?”

“Yeah, big. Where are you from, if you don’t mind my asking?”

“The Jovian moons. My parents were frontier doctors.”

“Frontier? But they’ve been settled for a century!”

“Sure, but they’re big too.” She laughed. “Like Samwise. Every time some ice prospector finds a new cache of volatiles, there’s a run to set up a new settlement.”

“Volatiles? What is this, the 20<sup>th</sup> century? Why not fusion?”

“Earthers...” She shook her head. “Sorry. Fusion reactors are tough to build, and they take time. Years — Jove-years, I mean. Volatiles are easy. I must’ve seen a dozen new towns on Callisto and Ganymede with my moms. It was always the same — get there first, burn the volatiles while you dig tunnels, plant the bloom farms in the melt, and charge the mineral prospectors for the right to dig in your claim.”

“What happens when the volatiles run out?”

“That’s only a worry if prospectors find some valuable mineral. It goes two ways — if no one finds a thing, everything is abandoned long before the volatiles run out. Or someone finds something. If it’s a big enough vein, then some investor will cough up the cash to build a fusion plant.”

“Exciting stuff.”

“How about you? Tell me about Earth.”

“Have you ever been?”

She shook her head. “Expensive journey, even for doctors. Plus, all those open spaces...” She shivered.

Konami raised his eyebrows. “Samwise is gonna have those big open spaces.”

“Yeah, I know,” she replied. “By then, I’ll be accustomed to it.”

“Accustomed? On a spaceship?”

She laughed, gesturing up and around the cylinder of *Aotea*. “There’s not a single chamber on Ganymede as big as one of the Cans.”

Konami hadn’t thought of it that way. “Did you ever go to the surface?”

“Occasionally. Just for fun, really... but it’s such a pain, suiting up. Kind of a rite of passage, unless you’re a prospector.”

The way she looked at him brought him back. Way back – he hadn’t been in a serious relationship since Earth, and not even recent Earth. More like a decade before. He felt an overwhelming longing, and it was gone in an instant.

“It will be different on Samwise,” he said. “Real sky — blue and violet, I think — not just black and stars.”

She smiled and put her hand on top of his. “I’m looking forward to seeing it.”

## CHAPTER 11

“Fuck!”

For the third time in the last fifteen minutes, Konami bumped his head on some overhanging object. Mattoso didn't remember him being clumsy at the scene of Muahe's death — in fact, he had been rather adroit in navigating through the passageways. *Maybe he's distracted?* Or maybe he just wasn't used to this part of the ship. Mattoso could count on one hand the number of trips she'd made to the Fabrication shops, deep as they were beneath *Aotea's* living spaces. The curses were a little much, though. *Did aggression count if it was against inanimate objects?* She didn't recall anything specific on the subject from various SNH tomes. But his scowl certainly seemed un-Aotean.

She tried to focus her mind on the task at hand. She'd had a little blow up with Pat that morning and her mind always seemed to go into overdrive after their rare fights — *what if they leave me? What if they've had enough?* She knew it wasn't logical. They'd had these little fights before, usually about something trivial like conflicts on their calendars, and it always blew over. Usually in less than a day. Another bump and a curse from Konami brought her attention back, and she suggested they slow down, but he waved dismissively and blamed himself.

They passed a shop and stopped to watch. A narrow hatch opened up into a very crowded workshop. Along a short conveyor belt, robotic arms moved so quickly as to blur together, building up what looked to be the main casing for one of the ubiquitous DustBots, molecule by molecule.

Mattoso asked if he'd been in these spaces before.

He turned and furrowed his brow. “Of course. Ship's quals. Gotta tour every space on this tub.”

“And since then?”

Konami scratched his temple. “Maybe once or twice. I'm not sure, though — why would anyone need to come down here? Anything I need, I just make an order.”

“Sometimes folks just don't want to wait.” They both turned toward a little passageway to their left — the speaker was a little bald man, almost as small as a child.

“Chief Inspector, I presume?” said the man. He was accompanied by a round-domed TaskBot, child-sized and vaguely human shaped, which the little man occasionally patted on its “head.” Probably the most common type of robot onboard aside from the cleaning Bots, TaskBots were utilized for assistance and general manual labor throughout the ship.

“Yes,” answered Konami. “And you must be Fabrication Engineer Zubiri.”

The engineer came forward and stuck his hand out. “A pleasure,” he said as he shook Konami's hand.

He looked at Mattoso and smiled, and she introduced herself. His hand was dry and papery.

“Enjoying our handiwork?” he asked, idly scratching the TaskBot where its ears would be, if it had any.

“Yes, very impressive,” replied Mattoso. “Is it all automated?”

“Come, I'll show you.” Zubiri led them past a few more shops of varying sizes and functionality. They seemed to differ based on the material and size of the objects produced — one small shop was making household sundries out of polymers, while the largest shop was putting together an enormous alloy object that could be destined for a fusion reactor.

They arrived at the fabrication control room, manned by a single fabrication tech presiding over a jumble of monitors and touchscreens. Two additional stations were unmanned.

“I remember, from my quals,” said Mattoso. “Only one fab tech on duty at a time.”

“Normally, that’s correct,” replied Zubiri. “For unusual orders, or particularly high-volume times, we might assign a second tech on watch.”

“And these extra stations...” started Konami.

“...Are for special orders, usually,” Zubiri finished for him. “Not everything is in the main catalogue. And some Aoteans enjoy designing their own products, even down to the molecule.” He laughed. “A few weeks ago, a youngster came in for a new set of polymer dishes. He demanded a strict molecular count — powers of the number two!”

“We had fun with that one,” the fab tech added.

“Fascinating,” said Mattoso, though it wasn’t. But maybe she could come back later and finally get a blanket that wasn’t too warm and wasn’t too cold.

“So what is it I can help you with?” inquired the fabrication engineer.

“You’ve heard about the incident with DT1 Muahe?” Zubiri answered affirmatively, and Konami summarized their findings so far with regards to the mask and filter. “We’d like to see one produced, soup to nuts.”

“That shouldn’t be a problem.” Konami gave him the fab number and the fab tech entered a string of commands.

Zubiri ordered his tech to wait, and led them to one of the smaller fabrication shops. “Go ahead,” he said into his wearable, and the automated shop sprang into action. “As you can see,” narrated the fabrication engineer. “The first step is for the printer to build the ‘draft,’ as we call it.” Mattoso watched closely as a small, oblong machine glided back and forth over the beginning of the conveyor belt, accelerating to a blur. It was finished in less than a minute, a soft polymer object in the rough shape of a breather mask filter. The engineer’s pride in his work was evident on the man’s face. “The draft advances forward to the shapers.” Insectile arms skimmed over the surface of the draft, cutting and trimming the details of the filter into the draft. “Then, the cladders.” Another set of little automated arms, this time attaching generic tags and clips used for countless applications. “And finally, the scan.” The filter slid into a transparent box and was lifted and spun. “The green light tells us the scan was satisfactory, so it’s packaged and sorted.”

*So they’re scanned...* Mattoso thought back to the lab analysis. “Would the scoring on Muahe’s filter be picked up by the scanner?”

“May I see it?” asked Zubiri.

Mattoso projected on a bulkhead and showed the engineer close-up images of the defective filter.

Zubiri sent his TaskBot to pick up the just-produced filter, removed the packaging, and they compared it to the images on her projection.

“Absolutely. The scanners would pick this up in seconds. Their resolution goes down to the nanometer scale, and this would be well out of tolerance. My friends, this was no fabrication error.”

Konami crossed his arms. “So the scanner never makes mistakes?”

The engineer’s brow furrowed. “Impossible. Each box has three scanners, and they all have to agree to go green.”

“Can the scanner be disabled?” asked Mattoso. She noted that the chief inspector did not look satisfied.

Zubiri scratched the top of his head. “I suppose, but only from the control station. And it’s not a standard procedure — I don’t think anyone but one of my Techs could do it.”

A shadow of a grin crept into the corner of Konami’s mouth. “How good are your logs?”

The engineer tilted his head. “As good as any, I suppose. All fabs are logged automatically, by date, fab number, and quantity.”

“And originator?” Mattoso chimed in.

“Yes, originator too. At least for outside orders. Manual on-site orders, like this filter, wouldn’t record an originator.”

“Thank you, Engineer.” Konami had apparently heard enough. “We’ll need to see all logs for these filter fabs, going back six months.”

“Six months?”

Konami did the math in his head. *Not everyone’s from Earth.* “One hundred eighty days. To start with. And I want your watch logs too, cross referenced with the filter fab times.”

“That might take a while. We’re just about to start a refurb of—”

“I’d be very grateful if you could have them to me by tomorrow morning.”

“Tomor...” Zubiri met Konami’s eyes and his expression hardened. “Yes, tomorrow. Understood, Chief Inspector.”

## CHAPTER 12

Konami yawned as he scrolled through the logs from fabrication. He was tired, but it was almost a welcome tiredness. Tired from honest police work for change, rather than from extreme boredom.

For the first time in at least a year, he considered that perhaps it wasn't a mistake to join the crew. Maybe they did really need him.

The breather filters were ubiquitous onboard *Aotea*, stored in bulk anywhere breathers were found — and considering that, in emergencies, specifications called for the ability for every single soul onboard to be able to don a breather at once, that meant that they were stored all over the ship. *But why do we use so damn many filters, when there hasn't even been smoke, much less a fire, in months?* A quick query revealed all the various events that could result in someone putting on a breather — training, various practical factors for qualifications, hazmat and hazspace evolutions, and more. And every time someone used one, they ordered a replacement, to keep the stocks full. *All breathers shall have no less than three clean and unopened filters stored with them at all times*, according to the specs. Practically speaking, this meant that most breathers had five or six filters stored alongside them to account for any delay in ordering new filters when one was used.

So that added up to a few dozen filters ordered each month. So far almost all of them were ordered through the Supply system, which meant that the individual making the order was recorded. And the department that the filter was ordered for — which often didn't match the rate of the ordering individual — was recorded as well. But there were a handful that were ordered in person, at the fab controls, with no delivery recorded — they must have been delivered and replaced by the ordering crewmember.

Fingers dancing in the air, Konami started two lists — one of all the filters that were delivered to the Sewage department, and one of all the fabrication techs on duty when the anonymous orders were made. Thinking about it further, and considering how easily filters could be swapped out, he made a third list of all the filters that were ordered by habitability techs, since the defective filter was in a Hab space. He sighed when he realized how many records he'd have to pore through to account for each and every one of these filters. Maybe someone could make a NetBug that could do it for him. He promised himself that at the next personnel review, he'd request that a Data Tech be permanently assigned to the Constabulary.

He was well into the records when the door to his office chimed. "Sorry, Cy, but he insisted," announced the Constabulary's duty secretary, Administrative Technician Second Class Yok-Sing, sticking his head in the door.

MRT2 Gustafson was pouring sweat, wiping it from his head with a rag. The young second's lip quivered before he spoke.

"Maybe... maybe it was my fault," said Gustafson, looking at the deck. "I just don't remember." The young tech physically deflated, but somehow looked relieved, despite the tears in his eyes.

Konami's guts twisted. *He's being honest*, he decided. But something still didn't feel right. He put his hand on Gustafson's shoulder, directing him down the passageway. "Let's take a short walk, Second," he directed, and the young man meekly followed.

The disciplinary process could be very fast, it turned out, contrary to the glacial place Konami recalled from past crewmember misbehavior. He made two calls — a brief one to Lieutenant Mattoso, and then to Gustafson's department master tech. Within a quarter-hour the master tech met them at the Constabulary. Mattoso and the XO arrived shortly afterwards.

Gustafson listened silently as he was taken off duty, after the XO and master tech made sure that Maintenance and Repair Department had enough manning to make up for his absence. The master tech walked the young man out, quietly consoling him; Gustafson would be confined to his quarters until a requalification plan was developed.

Commander Criswell turned to Konami, with an expression as close to a smile as he had ever seen on the executive officer. “Our mystery is solved, Chief Inspector,” said the lean commander. “Not two random malfunctions, but one — the solder shard in the hatch circuitry. The breather filter mishap was caused by personnel error — a failure to follow procedure.”

“We don’t know that for certain,” answered Konami, well aware of how weak his protests would sound. “Second Gustafson said he doesn’t remember—”

The XO cut him off with a swipe of his hand. “I think that’s enough grasping at straws, CI. I’ll have a writeup tomorrow for you to sign. You can feel free to add any objections you may have. But officially, this case will be considered solved once the captain signs it.” Criswell nodded to Lieutenant Mattoso, who had been sharing a sympathetic glance with Konami. “Your dedication is commendable,” he said with what Konami took as a sneer, and walked out, with Mattoso close behind.

Konami sat and put his head on his desk. He wasn’t even sure if it was worth going to Mayor Akunle to protest. He should be happy, he thought, with the case solved. *So why does it turn my stomach?*

## CHAPTER 13

“Can you feel it?” Madani asked Konami. “The rotation?” She took his hand in hers.

They walked along one of the garden paths on the surface, winding from park to park, allowing idle Aoteans to walk in pleasant greenery for hours without backtracking. Konami ignored the occasional odd looks from passers-by — he knew that his sunshade-like low-light goggles were out of place during the artificial moonlit “nights” of the ship — but when he was with Madani, he didn’t seem to care.

He had to shake off the feeling of disappointment from the ignominious ending to his investigation. It had been going so well – he felt it in that old investigative muscle that they were on the right track. But he couldn’t think of a logical reason to continue, beyond this gut feeling.

He reached down to pet Kostya, leaning against his shins, as she tended to do. Genetically engineered to form strong attachments and with little desire to explore, jenji dogs didn’t need leashes when taken on walks.

“When I stand still,” continued Madani. “Especially on the edge of one of the Cans, I imagine I can feel the spin.”

Konami stood still and tried to *feel*, through his feet. He vaguely recalled an exercise like this when he first joined the crew, and feeling the barest tremor.

“Close your eyes,” said Madani. He obeyed. “Anything?”

He tried his hardest, but couldn’t feel a thing, aside from the pitter-patter of activity at the little ‘park’ on the edge of the Can, and the vibration of Kostya’s heart next to his ankle. It was hard to avoid the obvious conclusion, that the mind created this kind of feeling out of hope and excitement. He tried to recapture some of that excitement, of being in a select group accomplishing something incredible.

“Fact or treat, fact or treat!” He opened his eyes, thankful for the interruption, and was presented with a tiny elephant. And not just an elephant — there was a little bear, a shark, and some sort of spotted feline. A few meters back, their MOMbot chaperone lurked, ignoring all the park’s activity except for the children under its care. The permanent smile on its cartoonish, teddy-bear face never failed to unsettle the chief inspector. Kostya inched forward and sniffed cautiously.

Konami crouched down and mustered up a smile. “You first,” he said, pointing to the shark. He thought he recalled some shark facts from old Earth documentaries.

“What’s a shark’s skeleton made from?” The voice was almost unbearably cute, high pitched and complete with a minor speech impediment.

Konami took a pose and scratched his chin. “Hmm, that’s a tough one. It’s not bone...” He raised his finger exaggeratedly. “I’ve got it! Cartilage, right?”

The shark seemed disappointed. “That’s correct.”

Konami crouched down again. “You know what else is made of cartilage?”

The shark was silent.

He reached carefully under the costume and tweaked the child’s nose. “Your nose! And now I’ve got it!” He put his thumb between his fingers and showed the child.

“No you don’t, it’s right here!” the youngster laughed.

Konami reached into his pocket and offered a candy to the child. “Who wants to be next?”

Each child took a turn, asking Konami and Madani a question about the animal they chose. Nominally, they didn’t have to provide a treat if they answered the question correctly, but most Aoteans ignored that rule and gave out something regardless. The delighted children moved on, and the MOMbot gave Konami a curious nod before following.

Madani clapped her hands together. “Beast’s Eve always makes me smile.”

“Me too,” he responded, trying to match her enthusiasm. “I look forward to it every year.”  
“Not year, silly. Cycle.”

Konami cringed. “Yeah, cycle, of course.” It was one of many little mistakes that marked him as an Earther. *Aotea*’s destination, Samwise, which orbited a planet that was much closer to its small sun than Earth, only had a “year” of about thirty Earth days. For holidays, birthdays, and similar events, Aoteans followed “cycles” consisting of ten Samwise years, adding up to three hundred days. Konami still couldn’t help thinking in Earth months and years instead of Samwise-years and cycles.

“Did you have Halloween, on the Jovian moons?” asked Konami.

“Halloween?”

“Old Earth holiday. Not everywhere, but it’s real big in North America. Beast’s Eve rips it off.” He started to explain the differences in the two holidays before being interrupted by a chirp.

Konami excused himself and stepped aside, answering the call. It was Emer – missing person: female, seventeen cycles, Fiona Vasquez. Her parents reported that she’d been missing and out of contact for several hours. The duty constable also sent him the interview transcripts.

*Seventeen cycles — that’s about fourteen or fifteen Earth years.*

“What’s going on?” asked Madani.

“Missing person. I’m afraid I’m going to have to cut short our walk.” He tamped down the embarrassment he felt just for being excited by the chance to be useful.

“Can I help? Maybe they’ll need a doctor.”

Konami almost smiled at this. *Maybe she really likes me.* “As long as you can keep up.”

He crouched down for a moment, petting Kostya, and gave her the order “Go home.” She took one last look and dutifully set out for his quarters, obedient as always. After that he set out immediately, barking orders into his wearable, to inform watchstanders and assign searchers.

Beta reserves might be a bit much, he thought, but it couldn’t hurt the department to get a little extra action, considering how habitually underworked they were. Once again, he felt that rush of pleasure — his mind and body were telling him that this was *great*. He decided not to feel bad about it — after all, there was a missing child. Maybe enthusiasm could help find her.

Madani asked where they were going.

“Not sure yet.” After scanning the interview, Konami called Emer once again. “Lee, it’s Cy. Vasquez’s parents mention a boyfriend, someone they don’t seem to approve of. Javier Khama.”

“Already on it. Calling him every few minutes, but no answer. Gregorian’s talking to Khama’s father.”

Konami ended the call and buzzed Gregorian – his Deputy had talked to Will Khama, a GravTran Engineer, but he had no idea where his son was.

He considered the information so far. *Where would a young couple go...?*

Madani asked how she could help. He considered asking her to call up her reserve MedTechs and nurses, just for extra bodies for the search, but decided it wasn’t necessary yet.

They were heading for the arena — he guessed that, when no events were being held, it would have a plethora of cozy hiding spots for a young couple. Bystanders and other Aoteans gave way, sensing the official purpose in Konami and Madani’s stride. His wearable beeped — Emer had ordered all stations to report any recent anomalies, and he scrolled through the list, hazy in the air in front of him, uncertain of how it might help. Most were extremely minor malfunctions and log corrections, but one triggered something in Konami’s mind, recalling the duties of the boyfriend’s father, as they cut across a basketball court, and he thumbed a call to Gravity and Transportation Central.

A GT2 Udval answered. “Second, this is CI Konami. You got the message about the search?”

“Affirmative, CI. My rover is searching the machinery spaces as we speak.”

“What was this Ring malfunction you reported?”

“It was in the aft Ring — car four is having hatch problems. I’ve taken it offline. No big deal — the other cars will pick up any passengers until we get it fixed.”

Konami ended the call, turned around abruptly and, despite her long legs, Madani had to jog to follow his strides. They descended the nearest ladderwell and a moveway quickly zipped them to the central Ring. The Ring was still, sparing him the need of calling it, and they crossed through to the aft Can. Another moveway took them to the aft Ring, and Konami entered his override code to call car four.

He was about to force the door open when Madani grabbed his arm.

“Wait, Cy. They’re kids. They’ll be in enough trouble... do we really need to embarrass them too?”

He put his ear to the door and stifled a laugh — nothing but heavy breathing and moaning.

Madani listened as well and frowned at him. “Come on, Cy — we were all young once. Give them a break.”

He put in a call to Emer, directing them to cancel the search and send deputies.

The chief inspector unhooked his belt buckle, the only metal he had on him, and used it to bang on the door.

After a moment of scuffling sounds and muffled voices, the young lovers emerged sheepishly, but at least they were fully clothed. Konami hid his amusement and looked sternly at the skinny, lanky youth. He asked what he’d done to the door.

The boy looked at the deck and mumbled something. Konami took a step forward. “Speak up! This ship is our home, Mr. Khama. Damaging a system could hurt someone, and it’s a serious crime.”

“There’s no damage!” cried the boy, rushing inside of the car and lifting a plate off the bulkhead, gesturing that Konami should come and see. “Look here — I just put it in local maintenance mode and locked the door shut. It’s Dad’s system — doesn’t do anything bad.” He flipped a switch. “It’s back now, it’s fine. No damage at all!”

“Okay. That’s a warning, Mr. Khama. I’m making a note with your name. No more tricks. If you want some alone time, then you’ll just have to find another way.”

“Yes, Chief Inspector.”

“That goes for you too, Ms. Vasquez. No more going missing. You ruined a dozen family dinners tonight.”

The young girl was crying, and Konami had to resist the urge to comfort her. “I’m sorry, Chief Inspector. We just...”

His deputies arrived, and Konami told them to escort the teens back to their parents.

Madani gave a throaty laugh after the deputies left with their charges. “So how often does that happen?”

“Missing person? Well, not too—”

“Kind of gives me an idea...” She took his hand and led him into the Ring car.

“Wait... what are you – oh. Yeah.”

## CHAPTER 14

Mattoso waited in Data Central, a crowded space near the forward Ring, buzzing with computer terminals. A jenzi cat roamed the terminals, meowing in front of each tech until she got the scratch or pat she desired. The XO had said that the murder investigation was complete. *But XO isn't here.* Days before, Lieutenant Mattoso had made an appointment with the Data Systems department chief, Master Tech Lopez, to go over DT1 Muahe's routine and duties. She had no other duties at the moment, so she decided not to cancel the appointment. She knew the XO might tell her that the investigation was over. But something still went wrong. Even if it was just a gear malfunction, the engineer in her wanted to know. Even more than that, she wanted to make sure it didn't happen again and hurt one of her shipmates.

Lopez was scowling. "I'm rather busy at the moment, Lieutenant, but DT3 Wren here would be happy to take you through Theo's basic routine." He immediately left for some other task.

Wren was short, slight, and round-hipped, and so bursting with youth that Mattoso wondered if he had finished growing. "Well, Lieutenant, I'm here to help in any way I can." The smarmy tone of the technician's high-pitched voice did not lend confidence to his words.

Mattoso asked to go through Muahe's routine. The young tech scowled for an instant before demonstrating his department's most common duties, one of which appeared to be affectionately nuzzling the department cat.

The tasks of data technicians were somehow both endlessly convoluted and endlessly tedious, but then perhaps her Operations tasks, balancing in real time the oft-conflicting power and system needs of the myriad of departments on board *Aotea*, would be equally unpleasant to data technicians.

Mattoso's mind drifted during Wren's droning. In her off time she had been compiling sources on an interest of hers, the history of the formation of the Society for a New Humanity, and the organization's ultimate goal, the construction and launch of the colony ship that she and twenty thousand others called home. There were gigs and gigs of data on most cycles in the decades prior to launch, but there were frustrating gaps, coinciding with apparent dips in SNH influence and wealth. *Maybe I'll ask Elena Conneer.* The journalist seemed to have access to information ranging from the obscure to the forgotten. She surprised herself by realizing that just a few cycles ago, the idea of bypassing the ship's records onboard for an unofficial source of information would have struck her as dubious, if not sacrilegious.

Something DT3 Wren said snapped Mattoso back to the present, and she asked him to repeat it.

"I said that the NetBug tracer is a cyclical task, but Theo must have wanted to get it out of the way since it wasn't due for a quarter-cycle or so."

"Hold on a minute," responded Mattoso, reading her notes on her lens. She scrolled to what she'd noted the first time she and Konami talked to DTM Lopez. "You said it's every cycle?"

"Yeah," yawned Wren. "It's a pain in the ass — needs a deep trawl of the net, and it can be disruptive to users while it's in progress." Mattoso located the line in her notes — *DTM notes that Muahe's tracer task was every thirty days.* She shook her head to herself. *Thirty days ain't the three hundred-day cycle, Master Tech!*

Wren sniffed. "But Theo, he was special..." The young tech cleared his throat. "He had a great work ethic, is what I'm saying. He would always help you, no matter what, and always wanted to stay ahead of things." Mattoso hesitated, and added a note that DT3 Wren seemed to have some very fond feelings for the deceased. She double-checked the security settings for her notes to make sure they were private.

“Master Tech?” Mattoso called out gently, repeating herself until Lopez turned around from the monitor he and another tech were hunched over.

“Yes, Lieutenant?” grunted the scowling man.

“What’s the periodicity to run a NetBug tracer?”

Lopez’s mouth hung open for a fraction of a second. “Why, every cycle, of course. It’s a very demanding task.”

“Are you sure? After the incident, you said it was every thirty days.”

“I don’t think so, Lieutenant. I’m quite sure I wouldn’t make that mistake.”

She wanted to respond, but couldn’t come up with anything before he spoke again.

“If you’ll excuse me, Lieutenant, we’ve been a bit short-handed since the tragic death of one of my best men, so I need to get back to work.” The master tech turned and proceeded to a terminal at the other end of Data Central.

“Whoa, that’s cold,” said DT3 Wren.

*Could my memory be off?* As Wren brought her to another task, she reviewed the notes for a third time. *No. No fucking way I hear “cyclical” and enter “every thirty days.”*

If she wasn’t wrong, then she wasn’t sure what that actually meant.

## CHAPTER 15

Despite his complaining, Konami could tell that Agro-Engineer Fitzkelly loved his job. His enjoyment was so infectious that he actually felt a bit jealous.

“No one wants to see the Sausage Factory,” said the mousy engineer. “Three quarters of the calories consumed onboard are produced here, but all anyone wants to see around here is the Garden.”

“Why do you call it the Sausage Factory?” asked Madani. She and Konami had spent most of their non-duty hours of the past few days together. “Cause of the vat-meat?”

Konami was pleased that he already knew the answer — Engineer Fitzkelly was one of the handful of other Aoteans onboard that used Earth idioms.

The wiry man shook his head vigorously. “No, no, it’s not just vat-meat. That’s just a fraction of what we do.” He led them to a massive tank, with clear tubes pulling off a greenish liquid. “Cyanobacteria — that’s the real staple onboard. Everything you eat — well, everything but a salad, fresh from the garden, I suppose — has cybac in it. They don’t have much taste, but in protein and carbs they make up most of our calories.”

Konami wrinkled his nose and a few Agro techs chuckled at Fitzkelly’s complaints.

The engineer sighed. “But I suppose I can show you the meat tubes, if vat-meat is your thing. Right this way—”

“I think that’s enough manufactured calories for now,” said Konami with a slight grimace. “Ilsa?”

She cleared her throat. “Yes, of course. Thanks so much, Engineer. To the Garden?”

Konami agreed.

Fitzkelly scowled and stomped away, and Konami and Madani made their way, hand-in-hand, a few compartments over to Aeroponics, also known as the Garden. Between rows and layers of fruits and vegetables and even a few decorative flowers, they walked. The walkways were so narrow that they were nearly joined at the hip, and Konami felt like a teenager again, walking with a date between the skyscrapers of Singapore.

At an alley they stopped and kissed. Since Beast’s Eve they had spent most of their free time together; Konami found he had far more of this precious resource than his girlfriend.

*Girlfriend... doesn't seem so strange, all of a sudden.* The glimmer of happiness and optimism, that was strange. He let himself be lost in the moment, focusing on the softness of Madani’s lips.

“Oh, I’m sorry...”

Konami looked up abruptly. His eyes widened for a moment when he realized who it was — the SNH Bigwig, Hamad Maltin.

“It’s Professor Maltin. So sorry to interrupt.”

“No problem at all,” said Madani, grinning at Konami. “The Garden is yours, right?”

Maltin smiled — the effect was somewhat remarkable: with the smile, his coarse, leathery features softened into a warm grandfather’s face. “Yes. I designed the Aeroponics compartment, years ago. Decades, ago, in fact — even before construction started.”

Madani said that it was beautiful.

“Yes, beautiful. And functional, too.” The pride was clear in Maltin’s voice. “It requires barely any power to distribute the water and nutrients into the air. Even with no power, the passive misting will keep everything alive for weeks, or more.”

“Very impressive,” said Konami, trying to involve himself once he figured out that Madani was interested. “Will this be how we grow food on Samwise?”

“To start with, yes — probably from *Aotea* itself, in orbit. Along with the cybac reactors and such. But hopefully, one day, we’ll be able to grow food on the surface of Samwise — without harming the native life, of course.”

“But how?” asked Madani. “We can’t know how the native vegetation will react.”

“Of course. But we’ll spend many years studying the properties and genetics of the native life forms, and before we do anything on a large scale we’ll perform quarantined experiments and tests.” He smiled. “I know many Aoteans look forward to landfall, assuming that we’ll have a bounty of fruits and vegetables... but unfortunately it will be many years before we’re eating anything different from what we eat now. The green rationing will be in effect long past the first day of settlement.”

Konami’s attention wandered while Madani and the Bigwig discussed the future of Aoteans’ agriculture in more detail, but it got him thinking. When he first arrived onboard, he had thought that everyone’s focus would be on their destination: the lush moon Samwise, which revolved around the gas giant planet called Abthoth, a dozen light years from Earth. But Samwise almost seemed to be an afterthought, at least in many conversations he’d had. He recalled one Aotean responding to his question on Samwise with “Right now we’re on *Aotea*. In many cycles we’ll be on Samwise. But it doesn’t matter where we are — we’re already the New Humanity. Our new society travels with us.” SNH dogma, one of the many things that kept Konami from feeling like an Aotean, seemed to consider distance from Earth, both physical and philosophical, as far more important than one’s actual location. Considering his status as one of the SNH Bigwigs, Konami would have thought Maltin would be the last person onboard to be so interested in Samwise.

He wasn’t sure why this struck him as so odd.

“So what else on this tub should we see?” asked Madani with a smirk, leaning back in the booth of one of the cafes that dotted the surface of *Aotea*.

Konami asked what else there was.

“The Theatre,” she answered. “And the Repro Lab. And Engineering and Nav/Ops, of course, but we’ll need special permission.”

“I don’t know, zero-g makes me queasy.”

“It’s not quite zero — we’re still accelerating, so you’ll have a little weight. A few grams, maybe.”

“Oh joy,” laughed Konami.

A server brought their coffee, foaming the top of Madani’s order with a flourish.

“That’s quite a coffee mug,” said Konami, impressed at the bowl-like mug she drank from.

“The infirmary goes through three cups per day, per person,” replied Madani. “That’s the most of any department onboard. I checked. Supply’s threatened to cut our ration.”

Konami looked at his own cup — indistinguishable from all the other cups in the café, and all the others he recalled ever seeing onboard. “Where’d you get it? Did you design it yourself at the Fab shop?”

“Oh, it was cycles ago. I was going to, but they told me at the shop that there were tons of designs in the archives that no one ever used, and it was true — there were hundreds of dishes and mugs, and it was much easier just to pick one.”

“Interesting,” said Konami, before something fizzed in his brain. “Wait, did you say there are unused designs in the Fab archives?”

“Oh yeah. I had to scroll past hundreds, and look at dozens of designs.”

He stood up in a hurry and grabbed Madani’s hand, apologizing for having to leave in a hurry and promising to call.

He made the call to Mattoso as he was leaving, asking her to meet him at Fabrication.

“So you want to see filters, but not in the catalogue? Whatever for?” asked Engineer Zubiri. Konami couldn’t recall ever seeing him outside of the Fabrication shops, and he wondered if he ever left.

Mattoso asked if they could search by physical dimensions. Konami had filled her in on his coffee mug revelation as they arrived.

“We can search by any parameter you can think of.”

“But down to the nanometer?”

Zubiri smiled. “We can go to the picometer, my dear.”

Konami read off the dimensions from his projection, and the Fab tech on watch punched it into his console.

Something tingled in Konami’s head during the seconds it took for the terminal to report back its findings. Out of billions of product designs, there was a single match.

Zubiri bended to look more closely at the screen. “That’s funny... why would there be design for a defective breathing filter?”

Konami ignored the question, his head throbbing. It had been years since he felt this way. “The scanners wouldn’t pick this up, would they, Engineer?”

“No, it fits the design perfectly, so it would pass,” answered the Fabrication department head. His eyes went wide. “Chief Inspector, does this mean that poor Mr. Muahe—”

“When was this item ordered and produced?” interrupted Mattoso.

The Fab tech read the date off the screen. “It was done in person, here, so no names were recorded.”

Konami shared a look with Mattoso. “Just a few days before Muahe died,” she said softly.

Konami beckoned her to the passageway, taking off at a fast walk.

“So we go to the XO?” asked Mattoso, almost jogging to keep up with Konami’s long strides.

“Screw the XO,” said Konami. “We’re going straight to the captain.”

“Shouldn’t we test the filter first, just to make sure?” she asked.

He paused in his tracks. “Yes, that’s a good idea. We should have all the data to share. Can you take care of that? I’ll go straight to the captain and the mayor, but while I’m waiting—” His wearable buzzed. He almost ignored it, but recognized the characteristic trill of a call from Emer. He answered it.

## CHAPTER 16

*Goddamn it goddamn it goddamn it...* Sulemon Nicolescu's guts tossed and roiled so much that he groaned. *It was supposed to be smooth, easy. Painless.* But DT1 Muahe's death didn't sound painless. What was the right thing to do?

"It's bigger than us, bigger than anyone," the coordinator had said, after word got out about Muahe. "We all knew these times would come — they're just coming a bit sooner than we expected."

*A bit sooner? More like fucking Earth-years sooner. Decades, even. Dozens of cycles more onboard...* He knew in his gut things weren't going to get smoother, and easier. They never did. His thumb hovered over the "send" command on his wearable's projection. One message could end it all. Or would it just make things worse?

He didn't hit send. Instead, he reached for a bottle of medication next to his bunk. Thanks to his duties at the Chem Lab, Senior Chemist Nicolescu never had trouble acquiring the meds he needed.

It shouldn't have been this way. He didn't sign up for violence — even impersonal violence. Quite the opposite, in fact.

His quarters' front door chimed. "Go away," he whispered. He didn't have another watch until the following day. He didn't need to decide today. He could still think about it, maybe even talk to the Solacer.

It chimed again. After a third chime, he finally roused himself and stumbled over to the door.

He thumbed it open, sighing when he saw who was there. "Didn't we already finish—"

The needle jabbed his neck before he could see it. A cry of surprise came out as a croak, and his legs turned to jelly. As he hit the floor he reached for his wearable, but everything was numb.

## CHAPTER 17

“An injection wound was found on Chemist Nicolescu’s neck,” explained Konami, gesturing to the wide projection in the conference room. Captain Horovitz and Mayor Akunle had called an emergency department head meeting after Konami reported the senior chemist’s death and the breakthrough in DT1 Muahe’s case. “Preliminary analysis suggests that Nicolescu’s body reacted the same way that it would to certain types of neurotoxic venom, produced by some Earth animals.”

The shocked reactions – gasps, hands clapped over mouths, even department heads abruptly getting to their feet – in the room when the Chem Tech’s murder was revealed had almost brought a smile to Konami’s lips, even while he felt a bit guilty about the impulse. *Finally, they’ll see what people are actually capable of. Even in this little fantasy world they’ve created.* But he had to admit to himself that it wasn’t just a fantasy, at least not entirely. Aoteans were an agreeable folk, on the whole, and the rational part of his brain knew that he ought to be both pleased and honored to be a part of them. Even when the other part of his brain insisted on mockery and derision.

“Venom?” asked one of the Bigwigs, Wilson Paramis. “There are no snakes onboard *Aotea*.” The heavily built demographer chuckled openly, defying the tense atmosphere of the meeting.

“No snakes,” said Madani. “But I don’t think we’d have much trouble mixing up a synthetic venom.”

Another Bigwig, geneticist Mara Ngayabo, agreed.

Konami added that they hadn’t found a syringe.

After a pause, Captain Horovitz spoke up. “Director-Superintendent Akunle and I are treating Nicolescu’s death as a murder.”

Konami fought to hide the urge to snort after a clichéd round of gasps from the department heads, briefly waking up the cat Halifax from his slumber on the table next to the commanding officer. He collected himself, mentioning that this was not the first murder.

The captain agreed, and he took an incline of her head as license to speak. Konami had noticed no more reaction than the barest purse of her lips when he first explained the breakthrough in Muahe’s death to her and the mayor. On the other hand, Harry Akunle did nothing to hide his surprise.

Konami went through his findings from Fabrication, displaying the recordings and data for everyone to see. He made sure to make note of the contributions of Lieutenant Mattoso, who was undoubtedly fuming in the passageway for being kept out of the meeting. He explained, in detail, the proof that the anomalous filter was fabricated as defective on purpose.

The navigator, Commander Rusk, asked when the filter was ordered.

“It’s been only ordered a single time on record,” answered Konami, displaying the Fab order. “Days before Muahe’s murder.” Too late he realized Criswell might see this as baiting him, but the XO seemed to be as interested and attentive as everyone else present. Another asked who ordered it, and Konami explained that they were still trying to find out.

That prompted the captain to order that, going forward, there would be no more anonymous fabrication orders onboard.

A glance from the captain silenced a budding side conversation. “Taking all this into account,” said Konami. “We can conclude that the death was not accidental.”

“But the filter wasn’t replaced properly,” interjected Commander Argosi, the head of the Habitability Department. “Second Gustafson confessed, right?”

Konami was prepared for this, and displayed the signed statement of the Second-Class Maintenance and Repair technician. “It wasn’t a confession,” said Konami. “He just stated that he couldn’t remember if he followed procedure, and that it was possible that he failed to do so. But his record is otherwise exemplary, with no disciplinary actions at all. In my professional opinion, Second Gustafson was succumbing to a mixture of guilt and sadness over a colleague’s death, along with external pressure.”

“And it turns out to be immaterial in any case,” added the captain. “The filter that killed First Muahe was not the filter that Second Gustafson may or may not have replaced.” She turned to Commander Criswell and directed him to return Second Gustafson to duty. “A lesson from this,” she continued. “There will be no more rushing to judgment about junior crewpersons. Any disciplinary action going forward will go through the mayor and I. This ship and our mission will not survive without good morale for the crew, and morale will not survive if the crew believes the leadership is not on their side.” She met the eyes of every department head in turn. “Careers have been ruined, and lives have been lost, all because leaders no longer had the confidence of their team. That must not happen onboard. Is that clear?”

“Yes, captain,” came the unified response.

There were a few more questions about details of the case, but Konami was surprised to see that no one, including the XO, appeared skeptical of his conclusions.

“We are all agreed,” said the mayor, his characteristic smile absent. “We will be investigating two murders onboard. Correct?” He looked around the room, but no one dissented. “The chief inspector will continue his investigation, of course, which the captain and I agree is our highest priority, aside from continuing safe operations of *Aotea*. But there’s a larger question here. A murder requires a murderer. A killer among us. Perhaps even killers. Word will get out, if it hasn’t already, and people will be afraid.”

“Cameras,” suggested Lieutenant Commander Olin, the Comms/Signals officer. “For surveillance. We can put a nanocam above every door, at every junction—”

Chief Engineer Papka interjected, citing the charter and arguing that excessive invasion of privacy was one of the reasons for *Aotea*’s journey.

The meeting descended into a jumble of arguments until Captain Horovitz brought her palm down hard on the table. “Enough bickering.”

Konami jumped at the opening and read off his projection. “Section 5.13.2.b of the Charter: In response to shipwide emergencies, restrictions from subsection b.1 may be waived if both the Civil Executive and Operational Commanding Officer agree and declare Martial Alert.” Department heads scrambled to follow along on their own. Konami continued: “To continue Martial Alert beyond any thirty-day period, a majority vote of confidence from the Department heads is required for both the CE and the CO, and every thirty days thereafter, with the threshold to continue increasing by an additional single-vote supermajority each thirty day period.” He scrolled down, slightly confused by the arithmetic. “The restriction on unmanned cameras is one of the restrictions from subsection b.1. So according to the Charter, Captain and Mayor, if both of you agree, you may invoke this waiver.” *For thirty days, at least.*

The captain and mayor huddled together briefly, whispering. The three Bigwigs did the same. Hamad Maltin approached the captain and mayor, and after another minute, Captain Horovitz spoke, asking for more options.

Konami suggested more roving watches.

“The Constabulary won’t be enough,” cut in the XO. “Not even for a single Can. To cover both Cans, much less Ops and Engineering, we’ll need more deputies.”

Konami was surprised by Commander Criswell’s suggestion. A few department heads immediately offered their own personnel — they could go on three or four-section rotation for their own watch stations and would have several personnel left over to deputize.

“And they could carry cameras,” said Lieutenant Commander Olin. “No, seriously—” she added after Commander Papka groaned. “The Charter only bans unmanned or hidden cameras. It doesn’t say a thing about manned, visible cameras.”

“That’s true,” Konami agreed. “We can put a camera on every rover, and even every stationary watchstander. No special votes or waivers required, per the Charter.”

The captain and mayor huddled together again. This time the Bigwigs stayed away. “Very well,” announced Mayor Akunle. “Commander Chulanont, Fabrication will work with the Constabulary on the necessary camera specs. And the following departments will provide approximately one sixth of their fully qualified manning to the Constabulary to deputize: Propulsion and Power, Navigation/Operations, and Repair. Every other department will provide a list of personnel they can spare in case more are needed.”

Konami was dumbfounded — that would more than double his strength, if not triple. Maybe even more.

“Other business?” asked the mayor.

Konami’s mind wandered to the challenge of covering the entire ship with roving watches while the mundane business of *Aotea* was discussed. He had no stomach for “other business” when there was a double-murderer, or two murderers, onboard.

## CHAPTER 18

### HUMANS GO HOME!

Comms Techs have detected alien signals.

Two Aotians dead.

Coincidence? Or a sign that we should never have left?

Maybe we should take the hint! We were never meant to leave.

Maybe the universe sees humanity for what we are,  
and will never let us settle anywhere else!

Mattoso's concern grew as she saw this and similar sentiments posted anonymously in the comment forums and discussions, sometimes even in topics totally unrelated to the deaths. She ended the projection when she reached the Constabulary.

"How are the assignments and deputizations going?" she asked, taking the offered seat across from the chief inspector's desk.

"Ugh... this is what I get for requesting more people," Konami shook his head. "This tub's layout is damn complicated. Even with the two hundred and something deputies I'm about to have, it's going to be hard to cover it all."

Mattoso nodded agreement. "I have a thought on that, and it's tied to what I'm here for."

"What you're here for?"

"It didn't seem so important at the time, but now that we know we have two murders..." Mattoso explained the scheduling discrepancy between her notes and what Master Tech Lopez told her a few days prior. "I wouldn't have written down 'thirty' if he had said 'every cycle' or 'every three hundred days.' I'm sure of it."

Konami leaned back and scratched his head. "So he got it wrong... maybe just a brain fart?"

"Maybe," she agreed. "But he wouldn't admit it at the time. He said I must be mistaken."

"Big ego?"

"Perhaps." Mattoso leaned forward, lowering her voice. "But I think it's something else. I remember some old 'Investigator's Handbook' — it was really old... a scan in Ceres' educational archives, not even searchable until I ran it through the text-identifier! But it talked about instinct, and gut feel — an investigator would inevitably have to rely on her gut. And I think this was that, Cy. It didn't feel right when Lopez said it. Something wasn't right. I could *feel* it."

Konami looked straight at her for a long time. "So you said you had a thought." A blood vessel in his jaw pulsed.

She took a deep breath. "We need our own data tech."

He nodded very slowly.

She wasn't sure if he understood. "We need someone we can, uh, trust, just in case—"

"I understand," he cut her off. "We need to get into Muahe's logs, personal and otherwise."

"And not just his logs. With our own data tech, we can get into, well, any concerns we have about—"

He cut her off again. "Right. Don't say it. But who? And how?"

She had no answer.

Theo Muahe's best friend, Mechanical Technician Second Class Trung Olivier, looked worried just answering the door.

Konami nodded to her, and she asked about friends of Muahe in the Data department.

Olivier frowned. “I thought I told you before. He didn’t really get along with any of the other data techs.”

“Are you absolutely sure? He never talked about any of them in a, well, nice way?” she asked.

The mechanical tech shook his head but stopped abruptly. “Well, he was mentoring one. I guess he kind of liked her — him. I think he liked him okay.”

Mattoso ignored the misgendering, unsure whether it was deliberate bigotry or just carelessness.

The tech continued. “DT3 Wren. I met him once — strange kid, kind of a sarcastic prick, I thought. Didn’t have any friends at all. But Theo said he was a natural data miner, and programmer, and a hard worker. That’s the highest praise he ever had for any of the DTs. I guess that’s as close as it got to a friend in Data.”

“So, Third Wren,” said Konami, after they returned to his office. “Know anything about him?”

She checked her notes to her memory. “Yeah, he showed me around the DT spaces and their routine. I got the real impression he was fond of Muahe — maybe very fond of him.”

Konami pulled up Wren’s bio on his monitor. “Huh,” said the chief inspector, looking at Wren’s boyish countenance on the screen. “I remember him at the funeral. He took it hard. Very hard.”

“So is this our guy?” she asked. “Our ally?”

“I don’t know,” responded Konami. “But this has got to be gentle. Soft, even. Careful. Jesus.” Konami shook his head, his brow furrowed. “‘Allies’ implies ‘enemies.’ And we’re years — cycles, that is — away from Earth.”

“Or Axis,” she added.

“Axis?”

“Sorry. Just one of the few snips I remember about Earth history. Axis versus Allies. The bad guys and the good. Genocide and all that... you know, what we’re trying to get away from.” Her cheeks bloomed and she felt foolish.

He looked at her oddly. “Anyway, I was saying we need to be careful with this.” He fiddled for a minute, then projected on the bulkhead. “DT3 Wren was on watch in Data Central when the defective filter was fabbed and picked up, and on an Under Instruction watch in Navigation for ship’s quals when Nicolescu was killed.”

“So we can rule him out?” she asked.

“I don’t know if we can rule out anyone this early. But if we have to trust someone, I think this is as good as we’re going to find right now.” He scratched the back of his head. “I don’t think we should go together to recruit him. Too intimidating, for a young Third, I think.”

She nodded in agreement. “I’ll do it. I’ve already spent the better part of a day with him.”

“Use that gut feel. Your instincts. This is still a risk.”

She nodded and turned to go.

“Wait,” he said. “You said this would help with my deputies?”

“Oh yeah. A mapping algorithm. Engineering has the 3D layouts — it should be a snap to put together roving routes that cover everything. I could probably spend a half-day reading up and do it myself, but I bet a DT could do it in five minutes.”

Konami slapped his forehead. “Of course! Why didn’t I think of that?”

She grinned and left.

## CHAPTER 19

“When can I see you?” he asked Madani.

“Oh, you just want to see me, do you?” she responded through her wearable. Konami imagined her eyelashes batting. “What do you want to see me for?”

“I want—” *Damn*, but the way she flirted turned him on, even while it made him blush and lower his voice. “I want you to show me around the Repro lab.”

“Is that what they’re calling it these days?”

He coughed as some saliva went down his air passageway. A text alert came up. Konami caught his breath. “I gotta go, Ilsa. I want to see — I want you.” *Weak*.

“You’ll have me, Cy. Soon.” She ended the call and Konami stepped into the passageway.

Mattoso stood at the junction of the passageway, leaning against the bulkhead. “So he’s in?” Konami asked her, his voice low.

“Oh I’m in,” answered Wren, stepping out from around the corner. “Nothing better to do. And besides, someone killed Theo. I wanna help you find that *hijo de puta*.”

Mattoso chuckled. Wren’s exuberance reminded Konami of the youth of Lagos, and gave him a distinct feeling of nostalgia — which didn’t make much sense at all, since the data technician was born and raised Aotean. He was probably one of the oldest ‘natives,’ as those youngsters born on *Aotea* called themselves, onboard. It was possible he had never stood in natural gravity — Konami recalled someone telling him that, before departure, Aoteans were strongly encouraged not to leave the ship. Like most that were born onboard the colony ship, this meant his parents probably went through the genebank lottery — they would have been selected randomly from the Aotean couples who were interested in a child, and his genes would similarly have been selected randomly from the hundreds of thousands gene samples provided by applicants who just barely missed the final cut of crew selection for *Aotea*.

“So how do I help?”

Konami started to explain his problem with the roving watches.

Wren snorted. “You kidding?”

“It’s not an easy problem, I think you’ll find. With the number of temporary constable deputies assigned, about 50 rovers at a time should work. But the lower levels of the Cans are like a maze — every passageway needs to have coverage about once every hour or two, and that includes lockout spaces, trunks, and—” Konami went on for a full minute about the logistical difficulties.

“Done,” said Wren, grinning.

“What?”

“It’s done. Well, it will be in a few minutes. DustBots already do this — it’s built into their programming.” He projected onto the bulkhead. “They work together to cover the whole ship, for cleaning. I just modified a DustBot roving plan — changed the roving speed to 5 kph, the coverage parameter to ‘entire ship’, the sweep-size to line-of-sight, and the number of rovers to fifty.”

“But we don’t know how fast—”

“Oh don’t worry. I’m already running simulations — a tough cleaning spot for a bot might be like something interesting a rover sees and wants to look more closely at — we’ll see what areas don’t get enough coverage. I’ll have a few million sims done in a half-hour or so.”

“Huh,” grunted Konami. Just like in Lagos, the youths onboard *Aotea* could apparently still leave him confused and speechless. He’d have to praise Mattoso for her instincts later. “Thanks, Third.”

“So how do we find the killer?” asked the young data technician.

Konami led them from the passageway into his office. “Bea?”

She told them that they wanted to know more about the NetBut Tracer run by Muahe.

“I’d guess he was just trying to get ahead,” said Wren. “I mean, it wasn’t due for more than a quarter-cycle, I think. That’s early, but maybe he was bored. He was weird that way.”

“We don’t want to guess,” added Mattoso. “We want to know the real reason.”

Wren snorted. “Well how should I know? Maybe he made a note in his personal logs or something, but private logs are restricted—” The young Third’s eyes went wide for a moment. “Wait. The logs... you guys want me to...”

Konami waited, but he didn’t finish his sentence. “Yes, we want to see those logs.”

The data technician furrowed his brow, somehow looking even younger. “We’re going to need to schedule that with the master tech, then. Maybe the director, too. It’ll take a lot of bandwidth to get in.”

Konami was confused. “Bandwidth? Can’t you just guess the password?”

Wren’s laughter was high pitched and girlish. “Are you kidding? Theo’s a DT. Not just a DT, but the best DT onboard. You think he has a password that a person could just *guess*?”

Mattoso stroked her chin and nodded. “So the bandwidth is for a brute-force hack,” she added.

“Right. Guess the password, with a gigawhale of guesses per second,” he said, recognizing Konami’s confusion. “Uses up a ton of bandwidth. That’s the only way. Private logs are supposed to stay private. No back door and no data-net trawling. Hell, you can’t even delete private logs without logging in — they go straight to the solid-state drives!” He began tutting his fingers in the air. “So do you want me to send in a request—”

“No!” Konami almost shouted, worried at the speed at which Wren operated his wearables. “No request. This needs to be...”

“...discreet,” finished Mattoso. Konami nodded his thanks.

“Right, discreet,” said Konami. “If we’re not discreet, and the wrong person knows, then those logs could disappear forever — wiped from the drives before we take a look. That’s why we came to you personally, Third, and not to Master Tech Lopez, or anyone else.”

Wren scratched his head and played with his hands for a half-minute. When he spoke, his voice was softer, and pitched higher. “So that means, you think — well, you’re worried that the Master Tech might be... the killer.”

“We have no idea who the killer is,” Konami replied. “We’re pretty sure it’s not me, and it’s not Lieutenant Mattoso, and it’s not you. We need you to think, Third. How can we look at Muahe’s logs? Discreetly?”

“It’s the bandwidth that’s the problem,” responded the Third, his voice a little stronger than before. “If we can get thirty percent spared, we could get into the logs in less than a day, I bet. Maybe hours. But there’s no way we could get a spike that big, or even close to that big, without someone noticing. The data tech on watch will probably notice anything bigger than zero point one percent or so, especially if it’s ongoing. At point one percent, it could take weeks to get in. Maybe more.”

*Shit.* Konami only half-way followed as Wren expounded on the details.

“Could there be some way to mask it?” asked Mattoso. “Some way to make it look like it was just maintenance?”

The data technician shook his head vigorously, then stopped. “We can’t mask it, but maybe we could time it right.” His fingers danced again. “DT2 Kunayak. He’s lazy as shit. And he’s a big gamer. We could boost it up for his watch — it’ll be about once, for six hours, every day or two. I bet we could get away with one percent or so. Maybe a couple decimals more. If he notices, I think he’ll call me first — it’ll come from my account, and I’ll just tell him to shut up

about it 'cause I'm gaming. I don't think he'll rat me out... he'll want me to do him the same favor. Man, with a whole percent of bandwidth, we could game *smooth...*”

Konami looked at Mattoso, but she just shrugged her shoulders. “How long will it take?” asked Mattoso.

“With a percent? I'll do the calc later, but I'd guess a few days of computational time. Maybe more, or less if we're lucky.”

*Damn.* Konami did some quick math on his wearable — that could still be ten watches at least — it could take weeks for DT2 Kunayak to stand ten watches. But they'd run it at the lower rate for the rest of the time, so hopefully a lot sooner.

“Alright Third. When can you set it up?”

The young man fiddled in the air again. “It'll be ready by tomorrow when Kunayak takes the watch.”

Konami wished him luck and Wren left.

“So we have an ally...” he said to Mattoso.

“Three against a killer,” she responded. “We have the odds.”

He shook his head, pursing his lips. “I don't think we're facing just one.”

## CHAPTER 20

*I don't think we're facing just one...* Lieutenant Mattoso had asked him to explain, but Konami just said he had a feeling. That didn't help her anxiety, especially when she realized she had the same feeling. The CO and XO kept urging that everyone continue about their lives. They said there was no reason to believe anyone was in immediate danger.

She wanted to believe it. *And I wanted to believe in Santa and his clones delivering presents to obedient children from his workshop on Pluto when I was little.*

She was still struggling to accept that there could be killers aboard. That was why they left in the first place! Was this whole journey – the entire purpose of the Society for a New Humanity – for naught?

She refused to accept that. They weren't perfect, but that doesn't mean it wasn't a worthy goal. For all they knew, one or two killers managed to get past the *Aotea*'s character screenings, but everyone else was still as worthy as she'd believed from the beginning.

That had to be it. Anything else was unthinkable.

She had a little time before she was supposed to meet Pat at the Repro Lab, so she checked her network feed. The latest article on *Aotea Today* featured a text interview with the user of the handle Pol Revear who, apparently, originated the 'HUMANS GO HOME' forum posts:

*Aotea Today: What drove you to make these alarming posts?*

*Revear: It's not just me. There are many of us, and our numbers are growing.*

*Aotea Today: So what are your goals?*

*Revear: Simply put, our goal is to survive and protect all Aoteans. We are the first humans to leave Earth's solar system. We all know why we left — endless conflict, endless violence, the toxic culture inherited from humanity's birth and social evolution. But maybe we're not the only ones who noticed. Maybe they — and by 'they' I mean whoever is sending these signals — think that we're just going to bring that conflict with us.*

*Aotea Today: Do you think they're right?*

*Revear: I don't know. It doesn't even matter; what matters is what they believe. We're only just able to travel to other solar systems — anyone out there is going to be far more advanced than we are. If they want us to stay home, all that matters is what they believe.*

*Aotea Today: Is anonymous advocacy, and what some are calling vandalism, really consistent with the values of the Society for a New Humanity?*

*Revear: Telling the truth isn't vandalism, and there's nothing in the Society texts about anonymous advocacy. In fact, if I remember my history, one of Paula's biggest advocates before the Society was created was an anonymous writer.*

*Aotea Today: Why do you believe that these strange signals are related to the two recent deaths onboard?*

*Revear: Simple — it's too much of a coincidence. Two murders at the same time as unexplainable signals?*

*Aotea Today: This sounds far-fetched. Do you really believe Aoteans will accept that we're being warned to return home by aliens?*

*Revear: I'm not positive myself. But I'm worried. If my concerns are borne out, then we better turn around before we all end up dead.*

*Aotea Today: What do you think we should do?*

*Revear: If I were captain, I'd slow us down. If the signals continue, even as we turn around, then maybe it's nothing — just a comet reflecting a pulsar or something. But if it stops, or if they change, and especially if the deaths cease, then maybe that means they approve of our course change.*

Mattoso scanned the rest of the interview, and it was just more of the same — wild hypotheses and accusations and doomsaying. She shook her head and ceased the projection. *We were supposed to be the cream of the crop — the best twenty thousand of all of humanity, or at least the very best out of the billion applicants.* Her Earth-born grandmother used to say “when it rains, it pours” — an idiom unfamiliar to most Cereans, since the domes and tunnels on the asteroid had no weather patterns — but she had a feeling that it fit here.

“This is a weird time to be getting a pet, you know,” said Pat, smirking.

Mattoso and her lover stood in front of the Repro facilities while they waited for a Genetic Engineer to be free.

“We live on a spaceship, babe,” replied Mattoso. “Doesn’t get much weirder than that.”

“I’m glad we’re doing it here,” said Pat. “It’ll be a lot more fun to order in person than just through the net.” Mattoso squeezed her companion’s hand in agreement.

An older woman in a lab coat emerged from an office inside the Repro space and greeted them. She looked awfully familiar.

Pat whispered in her ear, wondering if it was one of the Bigwigs

*Holy shit!* It was. “Miss — Professor Ngayabo,” mumbled Mattoso. “There must be some mistake. We’re here—”

“You’re here to choose a pet, correct?”

“Yes,” said Mattoso.

“Then there is no mistake,” said Mara Ngayabo. Mattoso flinched at her stare. She knew that each the Bigwigs had a professional specialty, and performed duties outside of their unofficial advisory role, but she had never actually interacted with any of them other than in passing. Certainly not in any professional capacity. Mara Ngayabo was a Genetic Engineer, she recalled, while Hamad Maltin was an Agricultural Biotechnologist, and Wilson Paramis was a Demographer. “Let’s begin,” said Ngayabo, finally, leading them down a passageway.

In a small laboratory, a pair of genetic technicians worked from holographic displays, twisting and splicing and mixing DNA strands from dozens of lifeforms, each one marked by a digital image as it looked on Earth. Ngayabo pointed to a pair of heavy doors, set far apart on the opposite bulkhead. “Behind these doors are the most valuable treasures we are bringing with us.” For the first time she could remember, Mattoso sensed a flicker of feeling behind Ngayabo’s stone face. *This is what she cares about.* The Bigwig pointed to the larger door. “Simply put, we have brought with us the genetic legacy of Earth. Everyone knows about the millions of human genetic samples — the future populations of our colony on Samwise — specifically chosen for their hardiness and diversity, as well as positive neural traits.” Ngayabo pointed to the other door. “But that’s just half of our treasure. Joining them in the secondary bank are samples of thousands of non-human species from Earth — from microscopic creatures to marine behemoths; any creature that might possibly be useful or desirable.”

She led them to a dark room, handing out low-light goggles. “And here is the nursery.” Mattoso knew that Repro had the capability to incubate non-human animals in artificial wombs, but it was quite another thing to actually see these wombs — rows of translucent poly structures, a few actually occupied by alien-looking, wriggling zygotes, ranging from infinitesimal and magnified on displays, to “giants” the size of her big toe. A spindly, long-limbed TenderBot moved from womb to womb, taking fluid samples and administering nutrients, while a young apprentice veterinary tech looked on and took notes.

“Where do they all go?” asked Mattoso.

“If they’re not pets, then the vet lab,” replied Ngayabo. “For practice. Or other labs, for research. Skills need to be maintained, even if we won’t need them for decades.”

“You said you could recreate whales,” said Pat. “How is that possible? None of these wombs are big enough for a human, much less a whale.”

“We have other nurseries,” answered the genetic engineer. “With artificial wombs large enough for humans, and even for small cetaceans. Theoretically, once we establish a coastal colony on Samwise, we can use larger and larger adult cetaceans to bear the next generation of a slightly larger species, if we wish.”

“Why would we need whales?” asked Mattoso.

“Ask the ecology department,” said the older woman. She reminded Mattoso of a particularly harsh schoolteacher from her childhood on Ceres. “With the samples in the genebank and our nurseries, we will create a new biosphere on Samwise, with whatever Earth life we deem necessary or pleasing.”

“What about Samwise’s native life?” inquired Mattoso. The question burst out before she could hold it back.

“Ask the bioethicists,” responded the genetic engineer, leading them to a bank of monitors. “Now, your pet. Dog, cat, or other?”

Mattoso looked at Pat. “A dog,” she said.

Ngayabo led her through a series of choices — coat color, size, energy level, attachment level, affection, and more, showing signs of impatience any time they took more than a few seconds to choose. When it was complete, Ngayabo departed without so much as a goodbye, leaving them with a third class genetic technician.

“Your pet will be ready in approximately eight weeks,” said the Third. “You may come visit any time after week two to view its development.” The technician lowered her voice. “But I don’t think you’ll want to see it until week four or five. Before that it’s pretty much gooey-tadpole territory. And don’t worry about Engineer Ngayabo — you just had the bad luck to catch her on her once-per-month proficiency watch.”

“Not as much fun as you hoped, huh?” asked Pat as they strolled back to Mattoso’s quarters.

“It’s so strange, seeing one of them at work, on watch,” Mattoso replied.

“You’re not kidding,” chuckled Pat. “You should see our curriculum... I’m not sure who you learned about growing up on Ceres, but on Earth we grew up learning about Nzinga, Yoshimune, and Charlemagne, among others. Now, on *Aotea*, I teach kids about Edda Ngayabo, one of the founders of the Society for a New Humanity, and her granddaughter, our very own Mara Ngayabo. And before they graduate fifth cycle, every student conducts an interview with one of the Bigwigs.” Pat gave her a wry look. “Guess which Bigwig is everyone’s last choice?”

## CHAPTER 21

Konami waited in the passageway outside the Solacer's office, checking his feed for the text of his constables' interviews of Senior Chemist Nicolescu's colleagues. The chemists and chem techs were effusive in their praise for the deceased, offering to help in any way they could, but had no information that jumped off the projection as immediately useful. He'd been so busy lately that he hadn't felt bitter in days. When it occurred to him that, upon solving these crimes, everything would go back to normal, he felt a momentary panic.

As he waited for Mattoso to arrive, he found himself thumbing through Inspector Loesser's electronic interview notes — she had the habit of scrawling anything that caught her eye in the margins. Chemistry Director George was “smooth and polished, and overly verbose, but nervous as hell under the surface,” while the “hulking” Second Class Chem Tech Singh was “shaken and barely verbal.”

The search of Nicolescu's quarters had been a bit more helpful — an anachronistic handwritten dry-erase calendar, with the chemist's daily appointments scrawled in, led Konami to the passageway outside the office of Solacer Assunta Patil. Just as he checked the time, Mattoso arrived.

As if she could sense their presence, Solacer Patil appeared and beckoned them through an open doorway. The solace therapist had the grace and loveliness of a dancer, and wrinkles at the corners of her eyes and mouth did nothing to lessen her beauty. Her sleek, silken dress, and the exotic, colorful décor of her office completed the illusion that this was a very different sort of place, with a different sort of people, then the rest of *Aotea*. “Please, sit,” she offered, her voice low and melodic. “You're here about Sulemon.”

“Yes,” said Konami. He recalled his own most recent visit to a solacer, several months prior. Saara Angelini was short and curvy where Solacer Patil was tall and slender, but they had the same voice — confident, mature, and musical. He wondered if this was from solacer training. A look from Mattoso snapped him out of thoughts of his last visit. “His colleagues did not know of any close friends,” he said to the solacer. “Do you know if Nicolescu was close to anyone outside of Chemistry?”

Patil pursed her lips. “I'm in a very difficult position, chief inspector. I want to help your investigation in any way I can, but the Oath of Solace prevents me from sharing any details of my time with Sulemon.”

Konami anticipated this. “Voicenet: Charter doc eighteen.” He projected to show the Solacer. He realized, a bit uncomfortably, that he was getting very skilled at citing regulations to serve his investigations. It was a necessary skill, but it made him feel like a bullying bureaucrat. “Captain Horovitz and Director-Superintendent Akunle have both invoked this section of the Charter — that the needs of this investigation override any internal guidelines and regulations of individual departments.” He traced the applicable parts with his finger, explaining that the Therapy Director agreed that this includes the Oath of Solace.

Eyes scanning nothingness in front of her, the Solacer read for several minutes. She sighed and shook her head as she finished. “Very well. Even putting aside the Oath, there's not a whole lot I can tell you about Sulemon's acquaintances. He rarely spoke of others, and no one close.”

Konami asked how long she had been meeting with Nicolescu, and she said more than five cycles, since before the departure.

“So why did he come to see you?” asked Mattoso. “Intimacy?”

“Well, yes, I suppose. But not just intimacy. He had — a weight. That's what we called it — ‘the Weight’. He wouldn't say what it was — long ago I learned to stop asking. But it was always there, and it was always on his mind, and figuratively pulling him down.”

Konami leaned forward. "You must have had some idea."

"I considered many possibilities — pharmaceutical addiction, first and foremost. He was a Chemist, after all. But he didn't have any other signs. No lying, at least that I could detect. No physical signs." She spread her hands. "Perhaps it was some family secret, though he had no family onboard that I know of."

Mattoso interrupted. "Did this 'weight' get better over time, or worse?"

"It waxed and waned, mostly. I couldn't discern a pattern. But thinking about it since his death, I think it may have been getting worse, very slowly. In fact, the last time I saw him, a few weeks ago, it was as bad as I'd ever seen in him."

"You were with him for so long," said Konami, scratching his chin. "What do you really think it was?"

The Solacer looked down for a moment before shaking her head. "I think it was guilt. Overwhelming guilt. Over what, I don't know."

"Do you think this guilt had something to do with his death?"

She nodded immediately. "Absolutely."

Konami and Mattoso shared a glance.

"Was he a good man?" asked Konami. Mattoso raised an eyebrow.

Patil looked at him for a long time before responding. "He cared deeply about doing the right thing."

Konami sensed something unsaid. "But...?"

She looked away. "I'm not sure that he knew what the right thing was."

## CHAPTER 22

“It’s funny,” remarked Mattoso, in the passageway outside the Solacer’s office. “Hundreds of years ago, Solace was considered dishonorable, even unclean.”

Konami nodded. “And it wasn’t called Solace. At least the intimacy parts.”

Mattoso shuddered, recalling her schooling on Earth’s past barbarity. Just imagining being part of a society that constantly used guilt and fear, even of bodily harm, as a way to control people, gave her a twinge in her stomach.

“It almost made sense, I suppose,” continued Konami. “Back then, you could end up sick, or pregnant, or worse.”

Mattoso snorted, saying that it wasn’t about disease or children, but controlling people.

He chuckled. “We’re not exactly finished with taboos on *Aotea*, you know.”

She asked for an example.

“Like no romance within a department. Two years ago a couple of my constables were ‘solacing’ each other in the holding cells. Good kids, but I had to split them up, at least at work. I hear they’re still a couple.”

She asked how he picked which one to leave the Constabulary.

“I didn’t. They picked themselves. One of them loved the job and one didn’t. The one that didn’t is now a Dental tech, if I recall correctly.”

They walked in silence for a while — a silence that Mattoso found vexing, so she asked for his thoughts on Solacer Patil.

Konami scratched his chin. “Nothing groundbreaking. Nicolescu was troubled by something, and he was unsure about the right thing to do. That can probably describe most of us at some point.”

“But what about the guilt? Patil said it was overwhelming. That seems like a bit more than the usual troubles.”

“Yes, but that was just supposition.”

“An educated supposition,” answered Mattoso. “From someone in a position to know — as far as we know, the person closest to the deceased onboard.”

“Okay,” conceded Konami. “Let’s assume she’s right. What could he have felt guilty about? What could he have done onboard that was so bad?”

She just looked at him.

“Oh shit, of course! Well, she said that ‘the Weight’ had been around for as long as she’d seen him, and Muahe was only killed a few weeks ago, but obviously it could be related. So we see if there’s a connection between Nicolescu and Muahe. Anything. That’s standard procedure anyway, but we’ll kick it up to the top of the queue. We’ll pore through their bios, their histories before joining the crew, anything. Tell Wren. We’ll need his help.”

She nodded agreement, and then changed the subject and asked if he’d heard about the supposedly alien communications signals. Konami said that the Communications department head brought it up in every meeting.

“Is it just coincidence, do you think?”

The chief inspector blinked. “You mean could they be right, that aliens are trying to turn us around?”

She chuckled. “No, I mean is it really coincidence that we see these posts at the same time as the murders? Could they be connected, in a totally non-alien way?”

His eyes went wide. “I don’t know, but that’s a good point. Put Wren on it.”

“Wren?”

“Yeah. Maybe he can dig up the source of the anonymous posts.”

## CHAPTER 23

“You’re as clumsy as an Earther!” laughed Madani, gracefully “climbing” along the Engineering passageway.

“I am an Earther, remember?” said Konami, still having trouble with the right amount of force to use with each “step” in the zero-gravity Engineering spaces aft of the Cans. In addition to no visual indicators of “up” and “down,” the Engineering spaces were much more spartan and industrial than even the function-driven passageways beneath the surface in the Cans.

Madani crooked a finger. “No one onboard is an Earther anymore, or a Martian, or Lunan, or Jovian. We’re all Aoteans now, and in a few decades we’ll all be... Samwisers? Samwiseans?”

“Samwitians?” offered Konami.

“We’ll figure it out.”

Konami miscalculated once again and bumped his knee on a handhold, cursing.

“How long has it been since you stepped outside of the Cans?” asked Madani.

He thought about it. “Cycles, I think. I had to see every space onboard during quals, of course, but the zero-g always made me nauseous.”

“Are you okay now?”

He smiled. “Yeah, one of your techs gave me something, just in case.”

“Smart move.”

“Well this is one of the only spots on the ship we haven’t explored together, and I didn’t want to be sick... I don’t imagine zero-g vomit is much fun for anyone.”

She pulled him abruptly, giving him a momentary sense of vertigo, before embracing him with a kiss. “You know what’s a lot of fun in zero-g?” she whispered.

A Power technician scampered by adroitly before he could answer. He waited until the Tech was gone. “I think I might like to find out...”

With a smile, she pulled him along silently until they found an unoccupied Bot service space. Ignoring the clicks of a recharging DustBot, Madani slid the door shut and unzipped her coverall.

The buzz of his wearable snapped the doctor and the chief inspector out of their post-coital reverie. The Medical department head carefully disengaged herself from their floating embrace as they were, almost imperceptibly, pulled toward one bulkhead of the service space by *Aotea*’s gentle acceleration. The message was a text from Mattoso: *news from Wren on the signals — URGENT — my quarters*. Konami hastily dressed himself and bid Madani farewell, exerting massive willpower to pull away from her deep and passionate kiss before making his way through the aft Ring into the aft Can, meeting Lieutenant Mattoso and Data Technician Third Class Wren in Mattoso’s quarters and immediately asking what they found.

Wren looked at Mattoso for a moment before answering Konami’s question, reassured by her nod. The Lieutenant’s quarters seemed awfully claustrophobic for the three of them, but Konami had learned that Aoteans had more tolerance for close quarters than his fellow Earthers.

“The signals,” started the Data technician. “First, the small news. The strange posts are from public consoles around the ship, and anonymous accounts. Nothing we can do there.”

*Goddamn it*. On Earth there was always some camera running, whether on a bystander or from a store across the street. That obviously wasn’t allowed onboard.

“Secondly, the alien stuff — they’re coming from onboard.”

Konami’s jaw dropped. “Onboard? How on Earth...?”

“He monitored data traffic at the same time as Comms Central was hearing the signals,” cut in Mattoso.

“Right,” added Wren. “And there was a big spike in processing usage just a few seconds before the signals started, and it stopped right when they stopped.”

“Hold on,” said Konami. “Make it simpler for me.”

Mattoso took a breath. “From Ops, I asked Comms to report as soon as the signals started, at the same time that Wren was monitoring data usage. Pretty simple.”

“So there was a correlation?” asked Konami.

“More than a correlation,” answered Wren. “It was fucking on the nose. Like less than a minute before the signals started, I had my processing spike, and it was big — like a chunk of one percent of the whole damn ship’s processing power. And then it stopped at the exact same time that the signals stopped — I checked both logs, and they stopped within nanoseconds. And it happened twice — just the same way, both times.”

“If it was on the nose, why that extra minute before?”

Mattoso tilted her head. “Well, we’re not exactly sure. But whatever it was, I’m sure it took some preparation. Maybe that minute was for preparation.”

Konami asked if they could find the source of the increased processing.

The young Data technician chuckled. “A processor’s a processor. You can ask for any task — say, run a vid — from your wearable right here, and it could utilize any of the processors, from the little ones in the wearables to the big ones in Data Central, or even the backups a few decks down, if the demand is high.”

“So it doesn’t matter which processor was used?” Konami inquired.

“No — it’s selected automatically by the data queue protocol — it balances processing loads and whatnot.”

“Can we find out anything about the processing tasks, or who was using it?”

Wren groaned. “Ugh.”

Konami raised his eyebrows. “Well?”

“I suppose. Long fucking task, though. Don’t expect anything soon — it’s like digging through a garbage dump.”

“How solid is this?” asked the chief inspector, debating in his mind whether he should tell his superiors. *Don’t be the senior man with a secret* was a motto a veteran cop in Lagos told him many years before.

“Solid as the hull,” said Wren. “No doubt about it.”

Konami prepared himself to repeat Wren’s assurance as the department heads assembled in the conference room, sure that his news would be the biggest bombshell of the meeting. He had been just about to inform Mayor Akunle when the meeting was called.

When everyone was seated, the mayor turned to Konami, asking him to report on the roving watchstanders. The Captain added that it should be brief.

Konami cleared his throat. “The watches are going fine. Nothing to report.”

The captain nodded to Commander Konrote, head of Gravity and Transportation, who stood, and Konami awkwardly resumed his seat.

“Late yesterday the vibration sensor for the forward Can’s rotation gears tripped an alarm,” said the GravTran Commander. This single statement was enough to trigger shock from the other department heads — everyone was well aware of the significance of the rotation gears of both Cans for the normal operation of *Aotea*. “Our operational inspection revealed signs of damage, but we won’t know the full extent until we can open it up and look inside.”

A glance from Captain Horovitz silenced the growing murmurs.

Commander Konrote continued. “You all know what that means. We rig for loss of gravity in the forward Can, move anything necessary to the aft Can, and then Spindown the forward Can.” Even the glare of the Commanding Officer couldn’t silence a smattering of curses from the

department heads. Konami shook his head to himself as he realized what that would mean — oddly, his first thought was for his jenji dog Kostya. With no hands to grasp and pull themselves from handhold to handhold, dogs and cats were unable to adapt to zero-gravity. Konami could stay in his quarters in the forward Can if he didn't mind sleeping in zero-g, but Kostya would have to find temporary accommodations in the aft Can. *Maybe Kiro can watch her for me.*

"We don't know the extent of the damage, but it could be getting worse with every rotation," explained Konrote. "We need to Spindown as soon as possible."

"With that in mind," said Captain Horovitz as she flicked the comms button on the monitor at the head of the table. "Operations, this is the captain. Read the announcement brief and rig the forward Can for loss of gravity."

As the Officer of the Deck read a script explaining the need for Spindown and ordering the loss of gravity rig on the ship-wide announcing circuits, Konami realized that his news about the fake signals might be small potatoes. Nevertheless, he spoke up before the captain and mayor adjourned the meeting.

"One thing, about the signals."

Horovitz raised her eyebrows skeptically. "What signals?"

Konami gestured to Comms Officer Olin. "The aliens — or fake aliens, as we found out." He explained how he and Lieutenant Mattoso had determined that the signals were faked, careful to leave out Wren's involvement.

"Just processor noise?" asked Hamad Maltin, one of the Bigwigs.

At the same time, the Data Systems director, Shin, inquired why he hadn't been informed.

"You're being informed now, Director," answered Konami. From his conversations with Data technicians and the department master tech, he had the impression that Shin was more of an administrator than a data engineer.

The captain tilted her head and addressed the chief inspector, echoing Maltin's question. "Was the processing spike the only evidence?"

"No," he said, relieved that Mattoso had, just before the meeting, thought of a possible second piece of evidence. Konami read off his projection as Mattoso and Wren transmitted the data to him. "We also checked the Power logs, on the assumption that the signals would require a significant power source to match the power we would expect from an interstellar signal. Sure enough, we found a power usage spike at the same time as the signals. This one was even more precise — it started at the exact same time that the signal started, and stopped at the same time the signal stopped."

The murmurs started again, and this time Captain Horovitz didn't even try to stop it.

"I'm transmitting our findings so that each one of you can give us a second check," Konami added.

After reviewing for a few minutes, the Engineering and Comms department heads both agreed that the data looked conclusive. Konami didn't miss the nods exchanged between the Bigwigs and the captain as well.

"But how is that possible?" asked Shin. "Can't Comms tell the difference between a signal generated onboard and a signal generated from a distance?"

Lieutenant Commander Olin's eyes flashed. "Normally, we can. But that's just from spatial relationships — over time, as we move, the signal vector will change slightly, as our relative positions change. We don't normally think someone would fake a signal, so we don't normally account for any possibility that someone is changing that vector of a signal generated from onboard the ship on purpose."

Shin still appeared confused.

Olin sighed, explaining the technical details — with single boosters and a specific spatial arrangement, they could simulate a distant source.

Konami tried to follow along with the complicated explanation. He thought he got the gist of it — multiple signal-sources, which would have been coordinated and mobile, shooting signals at each sensor from a certain vector, very slowly moving (just millimeters, if he understood correctly) to simulate a source that was millions or billions of kilometers away.

A perturbed Commander Konrote interrupted and emphasized the need to supervise the zero gravity rig.

Mayor Akunle was huddled with the captain, who held up her hand to stop anyone from leaving, ignoring Konrote's frustrated expression.

Finally, the captain spoke. "Our first priority will be the zero gravity rig, and any inspection and repairs necessary."

"But that's not our only concern," added the mayor, taking the captain's queue. "Only the most urgent. I'm sure we've all seen the theorizing and hypothesizing on the net discussions; these two latest pieces of news will only increase the tension and confusion of the personnel onboard. As soon as possible, the entire complement, aside from vital watch stations, will assemble in the Arena, and we will answer questions for as long as we can. It's absolutely critical that we retain the full confidence of every Aotean —for this mission, and for the continuing safe operation of this ship."

*Holy shit!* thought Konami, as the meeting was adjourned. He supposed the Arena could hold every soul onboard *Aotea*, but it would be a tight squeeze. He always had wondered why it was so large — he'd never heard of a sporting event that was even half full — but this must be the answer. An old Earth idiom came to him, for some reason — something about eggs and a basket. He put that thought aside as he left.

## CHAPTER 24

The forward Can was starting to resemble an enormous spider's web. Mattoso shuddered as she recalled the childish fright she felt when, exploring a little used storage alcove in Ceres City, she stumbled into a nest of cobwebs. Spiders were one of the few Earth creatures that had, somehow, found themselves a niche in the tunnels of Ceres.

She yawned — she had been awake for a while, just completing verification of the rig at the Beach. *Slow as hell, but at least it was boring...* she thought, recalling the draining of the Beach's artificial lake. *And stinky, too...* She grimaced at the memory of the smell at the bottom of the lake, mildew and scum and miscellaneous organic residue.

"All clear," shouted a crewman, and a dull thudding "pop" sounded. Enormous reels of cables and webbing had been unrolled and were being propelled across the Can's empty diameter, crisscrossed and enmeshed such that, even should one find themselves floating in that empty space in the center of the can, there would always be a cable or webbing nearby to haul oneself back to the surface.

She idly scanned the news and discussion forums as she walked. *Don't believe it!* was the title of one thread, in which anonymous users argued about the truthfulness of the latest news regarding the faked signals. One poster believed the latest reports, but claimed that the signals were just a ruse by SNH operatives to manipulate Aoteans. Other threads contained polar opposite opinions, with posters demanding that such theorizing was contrary to the principles of the SNH, and that the conspiracists were continuing the pattern of strife and chaos from Earth.

Even though the vast majority of the forum discussions were still courteous and agreeable, she had the feeling something was changing. It used to be a challenge to find an argument onboard, even in the relative anonymity of the network discussions. Now they were getting the most attention, even if much of that attention were exhortations for calm.

She'd never had any doubt that her decision to join the crew of *Aotea* was the right one. Her parents had been inconsolable when she first informed them, more than a decade before. All her childhood they had told her she would stay on Ceres and work in the family restaurant; two of her brothers, more than a decade older, had become Ceres City cops, and her other brother Paolo was a bit slow, leaving Mattoso as the presumed heir to the family business. But once they learned of her plans, they walked back all their expectations, begging that she find another career on Ceres if she wished, or even (to Mattoso's amazement) go elsewhere in the solar system, where at least they might see her occasionally. But to leave for Samwise might as well have been a death sentence — albeit one with occasional, multi-year-delayed message vids.

She had been shocked at first. Her parents were die-hard believers in Paola Rahmon, even if they were never formally members of the SNH. Mattoso had thought they'd be ecstatic once they realized her plans. But her family's vids had become less and less frequent over the last year, except for Paolo, who recorded a short message every week for her, whether or not she responded. Thoughts of his bouncing leap for an embrace every time she visited made her tear up, and she tried to bring her mind back to the present.

Mattoso looked on as, hand in hand, a line of children made its way aft between structures and riggers. Furry, simian MOMbots gently herded the children, distracting the most confused and bewildered among them with juggling tricks as they walked. When she first arrived onboard from Ceres, she found the MOMbots on *Aotea* awkward and even disturbing. With their multiple-jointed limbs, they moved far more like animals than robots, though not like any animal she had ever seen in the Earth documentary vids. But the years onboard, along with the gushing reports of her fellow Aoteans on the unending tolerance, affection, and playfulness of the robots, had softened her opinion. The orderliness of the relocation of the children, along with the dutiful,

step-by-step compartment zero-gravity rig, contrasted sharply with the bickering and divisions on the net.

She looked again at the checklist projected into the air — Mattoso had been assigned to verify that a section of machinery spaces had been properly rigged for zero gravity. As she made her way down an access hatch she noticed more DustBots, TrashBots, and their ilk, than usual — the Can-wide rig demanded, temporarily, that every cleaning robot focus on uncontained liquids and small debris. One of the bug-like little machines was filling its expandable bladder with what looked like spilled coffee on the deck. Another swept trash and debris into little piles for some larger Bot to collect later.

The checklist guided her through the passageways and compartments, verifying that every hatch large enough for a guycable was rigged open, every tool was secured, every surface had handholds attached, and every large space was crisscrossed with webbing. Even the Bots rigged themselves from some silent electronic command — it was startling to see how many additional limbs the TrashBots, TaskBots, RoverBots, and others seemed to conjure up from their innards to crawl and climb along in freefall.

She passed by a pair of crewmembers arguing about the latest developments — one insisted that the upcoming Spindown was somehow related to the murders and the faked ‘alien’ signals. She couldn’t help but doubletake. *Confusion and doubt can lead to strife*, she recalled from the teachings of the SNH. *It’s just temporary*, she decided. *We’ll be back to normal soon*.

She cringed as she found a discrepancy against the checklist — a damage control toolkit inside a machinery space wasn’t properly secured to the bulkhead. Her orders had insisted that the Spindown was needed as soon as possible to minimize any damage to the rotation gears. But she recalled the oath she took upon earning the ‘star canoe’ emblem — the award all crewmembers received upon achieving full ship’s qualification — *an Aotean’s first duty is to the truth*. She sighed and marked the discrepancy on the checklist, knowing that another crewmember would have to repeat the entire rig in this section, along with another officer’s second-check. *Better the ire of GravTran than a broken skull from a floating toolkit*.

The vibe in the forward Can was much closer to celebration than to concern. The zero-gravity rig was finally complete, and hundreds of Aoteans had gathered to experience the Spindown and freefall — the first since launch. Hanging and climbing on the cables and webbing, Mattoso thought she spied some of the same children, still chaperoned by MOMbots, that she had seen marching aft earlier.

“Thirty seconds to Spindown in the forward can,” announced an automated voice.

Pat handed her a small tablet, and she asked what it was.

“Ginger, for nausea.”

Someone started a countdown.

“Is this really appropriate?” Pat whispered, clutching tightly to Mattoso’s hand.

“The Officer of the Deck checked,” she answered. “There’s no regulation against civilian bystanders for a Spindown.”

“...twenty-two, twenty-one...”

“Seems weird,” said Pat. “This isn’t supposed to be fun...”

Mattoso smiled at a pair of children swinging jointly around a stiff cable. “Maybe not, but they’re having fun.”

“... sixteen, fifteen...”

“Maybe we should too.” The Operations Lieutenant grabbed her lover’s hand and raced to the nearest unoccupied webbing base.

“... twelve, eleven...”

Laughing, they raced up the webbing, joining in the countdown as they ascended. Mattoso realized she had never been this high up inside *Aotea* — indeed, she had never been this high above any surface at all. The colony ship’s ‘buildings’ stood no more than a few stories at most. There wasn’t a single chamber in Ceres as large as one of *Aotea*’s cans. She had a momentary feeling of disorientation as she surveyed the interior cylinder of the colony ship — she realized that, as she climbed, the sense of “gravity” from the can’s rotation lessened.

“Don’t jump until the Spindown is complete!” someone shouted. “The countdown is just for the beginning!”

A MOMbot swung adroitly up a cable to gingerly return one of its charges to the surface.

“...three, two, one!”

“Spindown commencing.” There was a new noise. The dull hum that faded into the background, ever since the Can was first spun-up so many years ago, changed in tone, lowering and growing less regular.

Mattoso’s insides shifted, and she almost lost her grip of the webbing as her feet pressed down less and less in their footholds. She felt nervous. *Maybe this was a big mistake...* It was too late to climb back down. She smiled and hugged Pat with one free arm, trying to project a calm she didn’t feel.

Everyone seemed to be holding their breath. The hum lessened to a repetitive thump, slower and slower. And it stopped.

The pause was interminable. “Spindown complete.”

Mattoso’s worry melted away as children shrieked, bounding straight up from the surface, their laughter musical. She kissed Pat’s cheek, and let go of the webbing. “Come fly with me,” she bubbled, shooting off into the air.

## CHAPTER 25

Konami couldn't remember being this nervous. Was it being on the stage in the middle of the Arena? Was it the vast crowd in the audience — close to twenty thousand, almost the entire complement of *Aotea*, and the biggest gathering since departure? As huge as the ship was, it seemed absurd that everyone onboard could fit into this little stadium, a fraction of the size of the venues he recalled from the big cities on Earth. Was it his thoughts of Kostya, bewildered and whining since the move to Gregorian's quarters now that the forward Can was spun down to zero-gravity? Was it the paperwork waiting for him from the bumps and bruises from mid-air collisions following the Spindown of the forward Can? *Gonna have to recommend new guidelines: Cans must be evacuated before commencing Spindown!* Considering all the reports of minor injuries, he was glad he chose to remain in the aft Can with Madani during the Spindown.

Mayor Akunle and Executive Officer Criswell were handing out awards while Captain Horovitz sat on the stage, stone-faced as ever. Konami supposed Harry Akunle's idea of mixing in something positive — this spontaneous awards ceremony, most of which were given to junior personnel — with the briefing and question period about the most recent turmoil onboard, was wise. But sitting through the dozens of short speeches, most of them the same boilerplate about dedication, loyalty, and courage, made him wonder if it was worth it.

While the mayor posed, teeth flashing, with another award recipient — a young Human Support technician gaining her full ship's qualification — Konami looked around the arena, trying to identify his constables. The roving watches had been temporarily suspended, so Konami had shifted most of his constabulary into crowd control roles, managing the largest crowds they had experienced onboard, entering and spreading out inside the Arena in the aft Can. He had to squint, but he was able to make out the red sashes that marked his constables, spread throughout the Arena's seats.

He thought back to poor Kostya, as anxious as Konami had ever seen her. Positive personality traits had been written into her genetic code, as they were for all jenji pets, but apparently toleration of novel circumstances was not one of them. He supposed she would get used to it; she would be far better off in Gregorian's quarters than in the zero-g of his own. Imagining his dog flail and whine while bouncing around the zero-g cabin made him almost sputter in laughter, even as he cringed at the thought. *Wish Ilsa's place was in the aft Can...* What had seemed like a boon before — that Konami and Madani's quarters were no more than a ten minute walk away from each other — was now a real bummer, especially since the co-worker she was staying with was on the other side of the aft Can. From the other side of the stage she caught his eye and very subtly blew him a kiss.

Finally, Mayor Akunle finished with the awards, and yielded the podium to Captain Horovitz, who placed her hands on each side of the podium. "Two of our fellow Aoteans have been murdered," boomed the captain, amplified throughout the Arena. "Unusual radio signals that appeared to have come from far away turn out to have originated onboard. And now, half our ship is without rotation for repairs. You may have questions. In an orderly fashion, you may ask."

There was a long pause. Konami supposed that this might be the first time much of the crew actually understood that there was a murderer among them.

An Admin Chief explained how to tap into the question queue through a wearable.

After a minute the crew got the hang of the novel interface. The first question was about the cause of the damage to the forward Can's rotation gears.

"GravTran is investigating the damage," answered the captain. "So far there is no evidence at this point that it was caused by anything other than normal wear and tear. When the

investigation is complete, the rotation gears will be repaired and the Can will be returned to normal rotation.” *Normal wear and tear...* Konami highly doubted this was the case (and if so, worried about the ship’s prospects for the multi-decade journey to Samwise), but approved of the captain’s answer.

The next three questions were about details of the murder investigation, and the captain answered them with as little information as possible.

The fifth questioner stood up, halfway up the stands, and he looked familiar. *Where have I seen him before?* For a long ten seconds, he stared down at his hands, then spoke.

Somehow Konami knew that he was about to say something significant.

“I am a murderer,” said the questioner, scratchy vocal cords skipping like an audio glitch.

Konami was out of his seat in a flash, making his way to the field wall, and gesturing at the constables nearby the questioner. Out of the corner of his eye, half the department heads were madly gesticulating. One of the Bigwigs, Ngayabo, almost leapt out of her chair, only held back by Wilson Paramis.

“I am a murderer,” the crewman said again, much more clearly.

Konami recalled where he’d seen the questioner before – in the file after Nicolescu’s murder. This was the Chem Tech named Singh, the one Constable Loesser called “hulking” and “shaken and barely verbal”. He got down from the stage and leapt to climb the field wall to get to the stands.

Singh continued. “I killed First Muahe. I replaced the breathing filter with the bad one, and I shorted the hatch circuit. I put a plug in the piping to fake the clog.” He took a deep breath and continued, but his voice went silent. *Someone silenced his wearable.* Konami looked back at the department heads before vaulting over another short wall. Everyone in the Arena was on their feet.

Someone handed Singh another wearable. “I killed Senior Chemist Nicolescu. I injected him with artificial venom.” With a big hand, he wiped his brow. “But it wasn’t just me. I was given orders. There’s another plan for *Aotea*. Another mission.” He paused, seeming to gather his thoughts. “It’s not my mission anymore.”

The packed stands made it hard to approach, both for Konami and the nearby constables. With every step, Konami was filled with a growing sense of dread.

“What is it?” asked the captain, eyes wide and hoarse-voiced. “What was your mission?”

When Singh opened his mouth to respond, a rippling *crack* rang out, and his head exploded.

###

## APPENDIX: Historical Timeline

2027: Comet P/2027 Saini discovered by amateur astronomer

2032: Path of Comet P/2027 Saini analyzed and determined to bear a significant risk of collision with Earth, comet renamed Shiva

2034: Shiva calculated to have ~50% chance of collision with Earth in 2055, damage estimated to be comparable to the Cretaceous-Paleogene impact event

2036: Treaty of Cooperation for the Future of Humanity (popularly called Co-Op Treaty) signed by nearly all nations, with two major goals: alter the path of Shiva to spare Earth, and execute a plan for humanity's future in case the first goal fails. Major hostilities on Earth cease (with a small but vocal, and largely religious, opposition to the Co-Op Treaty)

2043: Operation Deflect team lands on Shiva and begins ejection of comet mass at high speeds

2043: First permanent facility, named Sanctuary, founded on Luna

2044-2050: Numerous small, free-floating habitats established in orbit around Earth or near-Earth orbit around the Sun, largely by the ultra-wealthy

2050: Advances made in life extension; average human lifespan ~90

2054: First permanent habitation founded on Mars

2055: Operation Deflect is successful; Shiva passes within 100 thousand miles of Earth

2055: CoOp Treaty signatories extend close ties, Union of Earth formed, commits to continuing colonization of the solar system

2060: Off-Earth population: ~2000 on Luna, ~500 on Mars, ~1500 on free-float habitats

2071: First permanent habitation founded on asteroid Ceres

2071-83: Numerous small permanent and semi-permanent habitations established on asteroids

2087: First permanent habitation founded on Mercury

2087-2094: Numerous organizations advocating independence from Earth control founded on Luna, Mars, and elsewhere

2100: Off-Earth population: ~10K on Luna, ~10K on Mars, ~500 on Mercury, ~10K elsewhere

2100: Average human lifespan ~100, 85 year old adults are as physically capable as 65 year olds in 2000

2114-2133: DarkSide telescope array on Luna identifies numerous extrasolar planets and satellites-of-planets with signs of liquid water and possibly life, including moon of a planet orbiting red dwarf star Gliese 876

2101-2151: Habitations founded on numerous moons of Jupiter and Saturn

2137: Population of Luna votes to continue ties to Earth, population of Mars votes for complete, amicable independence

2138: Martian Declaration of Independence signed and delivered to Earth, Earth leaders promise objective and respectful response

2138-2139: Evidence found of weapons provided by Earth to anti-independence forces on Mars, Martian Civil War fought between pro- and anti-Independence forces, ~400 casualties, Independence forces victorious, major political scandal on Earth ends the careers of numerous politicians including President of the Union of Earth, new administration apologizes to the newly independent Mars

2141: Society for a New Humanity (SNH) founded on Ceres, advocating a "clean start" for humanity free from the influence and bloody history of Earth

2139-2153: DarkSide array verifies evidence of photosynthesis on dozens of extrasolar bodies, including a moon (named Samwise) of the gas giant planet Gliese 876c (now called Abboth)

2161: Luna declares independence from Earth and separates peacefully

2171: Forwood drive invented — the first propulsion technology that would enable space travel to other star systems within a human lifetime

2178: Direct imaging by DarkSide array shows oceans as well as indigo-colored vegetation blanketing continents on moon of Gliese 876c called Samwise

2184: SNH draws up plans for colony ship to Samwise

2191: SNH begins construction of colony ship, ostensibly as a large, mobile, free-floating habitat, called Aotea, in the asteroid belt

2200: Off-Earth population ~50K on Luna, ~5M on Mars, ~200K on Mercury, ~500K elsewhere; most celestial bodies and free-floating habitations with more than a few thousand inhabitants are self-governing

2200: Average human lifespan ~120, natural limit appears to be ~150 years; with cloned organ replacements and other therapies, the very wealthy may live past 200, staying fit and active for most of their lives.

2202: SNH makes public colony plans for Samwise, to be funded by many sources including by volunteer colonists as well as volunteer genetic donors; they receive a very large response

2211: First “colonists” take residence on Aotea, construction and funding continue

2221: First baby born on Aotea

2237: Aotea departs for Samwise; ETA ~2292

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Andy Crawford grew up in New Orleans. After graduating from Louisiana State University, he served in the Navy as a submarine junior officer. Upon leaving active duty, he began working for the Navy as a civilian. Andy lives in Arlington, Virginia, with his wife Nina.

## OTHER TITLES BY ANDY CRAWFORD

Sailor of the Skysea

The Pen is Mightier

Untethered (short story, available online for free at Solarpunk Press)

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