

# MOTHERSKY

Jack Johnson

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## Prologue

'You know, you'll have to go home eventually Sergey.'

Makarov looked across. 'Will I?' he replied sardonically. 'Maybe I could just walk the streets for all eternity. Get myself press-ganged down to the surface. Steal a rover, escape out into the digging planes, never be seen again.'

The two boys crossed the road in silence, then began descending the steps down to Saltanova Street. 'Do you think your parents will cancel the party?' Sasha asked.

Makarov grunted: 'Yeah. The real question is whether do it before or after they hang my steaming entrails from the nearest street light.'

'Seems a little dramatic.'

They reached the bottom of the stairs, turning right. It was busy, even for a Thursday. The cycler that had arrived the previous week had brought its usual compliment of special settlers. Now they queued in forlorn lines outside of the kitchen and appliance stores. Long notices listed all the items no longer in stock.

The two pushed past the rows of depressed faces, crossing the square to the monorail stop. There they seated themselves upon the kerb, backs to the post office. For the first time, Makarov had the chance to properly examine his right hand. It still throbbed, though the worst of the pain had begun to subside. Three of his knuckles had turned a livid reddish-purple. He wondered if they were broken.

'I can't believe I let him rattle me up like that,' he muttered.

Sasha eyed the hand squeamishly. 'Well, he deserved it, didn't he? Saying those things about your mum.'

'Maybe. But it got him what he wanted. There's no chance I'll be allowed to play at the weekend now.'

They sat waiting. Across the road, Nastka's Café emitted its usual peppery, fried-cheese aroma, drifting to them in the coriolis breeze. That the restaurant had managed to survive the protein shortage of the previous year was a near miracle and a testament to the devotion Nastka commanded in the city. As Makarov gazed at the diners, he became acutely aware of the hole in his stomach. It was already

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well past dinner time.

To add insult to the thought, two steaming plates of potato and cheese appeared, making their way to the edge of the patio, before being set down on one of the outdoor tables. Makarov watched as the couple thanked the waiter. Then, after a moment, he frowned, leaning forward.

'What?' Sasha asked, seeing him. Standing, Makarov left his gutterball case and slowly walked several metres down the street, glancing furtively across the road.

'What?' Sasha repeated on his return.

'Yep, it's definitely him.'

'Who?'

'You see? On the outside tables, in the white sweater.'

'You mean the guy sat with the lady?'

'Yellow dress, yeah.'

Sasha eyed the couple, furrowing his brow. 'You don't recognise him?' Makarov asked, unable to mask his exasperation.

'Should I?'

Makarov could still hardly believe it. Trying not to draw attention, he gestured down the street in the direction they had come, to the great marble pillar stood at the centre of the square. Sasha's eyes immediately rose to the three stone figures at its top. Then he looked back at the café.

'What, you mean that... he's one of them. That landed with Comrade Saltanova?'

'The same: Novikov Damir Stepanovich. Everyone forgets about him because Saltanova was first on Mars and he was second. But he lead the first expeditions to Europa, Lapetus, Titan. He beat NASA to the pole of Enceladus, even after they sabotaged his submarine. He's the better the Cosmonaut, to be sure.'

Sasha furrowed his brow, peering at the humble-looking man. 'If he did all that stuff, shouldn't he be, like, ninety years old? He looks way younger than that.'

Makarov shifted excitedly. 'Yes, that's because of all the time spent in hibernation. He's tripped to the outer-system and back more times than either of us have even left this cylinder.'

'Damn,' said Sasha. At that moment the monorail appeared, descending noisily down into the street. Sasha hefted his equipment and rushed toward the stop. 'What are you doing?' he called back, seeing that Makarov had not moved.

'You go.'

'What for?'

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'I'm gonna talk to him.'

Sasha opened his mouth, then apparently thinking better of it, turned about and jogged toward the open doors. 'Alright. Good luck then!' he said as the car came to a screeching halt.

Makarov spent several minutes around the corner of the street, preparing various salutes into the window glass, carefully covering up his bruised hand. Then he set back toward the café.

The woman noticed him first. Seeing her polite, pointed glance, the cosmonaut turned. 'Hello there, Comrade,' he said as Makarov halted a little way from the table. The question was clear in his voice.

Makarov made sure to stand to attention, then gave his salute. 'I'm very sorry to interrupt you, Comrade Novikov,' he said to the air above the table. 'Might I say that it is a privilege to have you honour the Martian Soviet Socialist Republic with your visit, sir.'

'It's an honour to be here,' the explorer said amiably. Having set down his knife and fork, he extended a hand. 'What's your name, young comrade?'

'Sergey Makarov, sir.'

'Well, it's nice to meet you, Sergey. I must say it's not very often people recognise me anymore.' He indicated the woman sat across from him. 'This is Elena.' Elena smiled, likewise reaching across to shake his hand.

'You must excuse my husband's terrible table manners,' she said, tossing a napkin to the cosmonaut. 'Seven years retired and he still eats like he's sucking freeze-dry through a straw.'

'Pah,' dismissed Novikov, wiping the crumbs from his face. 'So, what can we do for you, Sergey?'

Only now did Makarov recall the purpose of his mission. 'Well sir,' he said, scrambling to produce his universal reader from his bag. 'I was hoping I could ask you a question. About the Titan expedition.'

'Of course. What is it you'd like to know?' Novikov's intrigue was clear.

After half a minute of frantic searching, Makarov found the page and laid the reader upon the table. Filling the screen was a single diagram. It was labelled:

*Figure 38. The dive of the bathyscaphe into Crevasse 41A, showing the descent of the manned submarine Kit-1. 4th June 2071.*

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Novikov tilted his head, gazing at the web of arrows and red scribbled notes adorning the document. 'I was reading your account of the dive down into Crevasse 41A,' Makarov said, 'and you said that during the dive you detected certain chemical compounds in the currents flowing from the core. And you thought these could be the bi-product of some kind of organism living down there, feeding on its tidal warmth.'

'That's right,' nodded Novikov. 'Though the possibility of such life had been theorised for a very long time.'

'Right.' Said Makarov, eyes still on the diagram. 'Finding extra-terrestrial life would be the discovery of the... well, all time. So you wanted to get to the bottom of the crevasse, to the core, to see if you could actually get a sample. But it turned out too deep, and you had to stop, else the pressure would destroy the hull.'

'It was destroying the hull,' Novikov replied airily. 'When we got to the surface, we found a three three-centimetre crack running down half the keel to the bulkhead.'

Makarov paused. The book had not told him that. 'Well, I was thinking,' he continued hesitantly, 'if there were zones where the core extended nearer the surface, there might be the same life there. And it might be shallow enough that another submarine like Kit could get down to it. You could get that sample after all.'

Novikov nodded.

Makarov went on. 'We were doing orbital mechanics last year and we learnt about the tidal resonances which effect the moons of Jupiter, and how they've been found to produce core extrusions at the high-latitudes. So, sir, I wanted to suggest that maybe something similar would happen around Saturn. I know it's different in a lot of ways, but it should have the same resonances, right? So, the extrusions might be the same.'

Makarov finished, glancing at up at the cosmonaut. Novikov went on starring at the notes scribbled upon the page.

'How old are you, Sergey?' he eventually asked.

'Thirteen next week, sir.'

He raised his eyebrows. 'Well, you've clearly worked this through very carefully. And if you'd found me twelve months ago, I'd surely have thought you could be right about this. But, I'm afraid the Institute tried one of those fissures just this January, working off a very similar theory to this, and they didn't find any

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extrusion.'

'Oh.' Embarrassment crawled over Makarov. 'I'm sorry sir, I didn't—'

'Don't be silly,' Novikov said sternly. He looked him up and down, apparently thinking. 'I'm not very familiar with the MSSR education system these days,' he said. 'You leave school when you're, what, sixteen?'

'Yes, sir.'

'Do you have any idea what you'll do after that?'

'Well, my year-master says that with my grades, I'll probably get called to one of the Engineering Ministries. He said that Munitions and Naval Propulsion have a lone-term recruitment drive, which I think means I'll be one of those.'

'I'm sure they do,' murmured Novikov. 'Your mathematics is strong then?'

Makarov nodded.

'And what about your athletics?'

'Well, I'm not the fastest runner in my class. But I can do three laps of the athletics field in under five minutes. And I'm float-back for my gutterball team.'

Novikov nodded approvingly. 'Then tell me then, young Makarov. Have you ever considered putting in an application for the Academy of Cosmonautics?'

'You mean, Moscow?'

'That's right.' Elena gave an encouraging smile. 'The life isn't for everyone, to be sure,' Novikov went on. 'But I know for a fact the MPI is looking for people with the kind of ideas and motivation you appear to have. If you're interested, I think you'd have a real shot at it.'

Makarov had been staring at his shoes. 'That's nice of you to say, sir. But— well, I'm—' Novikov gazed questioningly at him. '—I'm half Kyrgyz. That's why we were sent here, my Dad says.'

Novikov frowned, looking at Elena. 'The Cultural Security Decree,' she said quietly.

He closed his eyes, seeming to remember. Then he glanced at the enormous swaying poster of the Supreme Architect affixed across the street. 'Will this bullshit never come to an end?'

Makarov continued to watch his shoes, pretending not to hear the comment. Novikov seemed to reflect for a moment. Then he fished from his jacket a notepad. From another pocket came a bulky metal pen, both being set down before Makarov.

'If you don't mind, would you write down your citizen number for me?'

Fear suddenly gripped Makarov. 'Sir, I'm so sorry if I—'

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'It's okay, Sergey.' Elena touched his arm. Makarov hesitated another moment, then took up the pen. When he had finished, Novikov returned the pad to his pocket.

'Now listen, Comrade,' he said in a low voice, shifting his chair around to Makarov. 'If you really do want to be a cosmonaut, and you still want to be one in three years, send off an application. I will ensure it gets through the screening for you without any of this racial crap attached.'

Makarov could barely speak. 'Really? You can do that?'

'You have my word. Understand, though,' the cosmonaut continued, 'this isn't a free pass or anything. It's a tough selection process and you'll be up against a lot of very good people. You'll have to put the work in to get there. But I've got a real feeling you're up to it.'

He leant even further in, shielding his face from the red glow of the poster. 'For the good of humanity, we don't need more munitions experts right now, Sergey. We need people who can see that there is something greater to strive for.'

Makarov understood. 'I won't let you down, Comrade Novikov,' he said.

'Go on then Sergey. Or you're going to miss another tram.'

'Yes, sir.' Makarov shouldered his bag, then realised he was still holding the silver pen.

'Keep it,' said Novikov. 'If I do ever see you around the Academy, you can give it back to me then.' He smiled. 'Now get to it, Comrade.'

Part I  
The Love

To all you enemies of the revolution, you betrayers of the people. To those of you unwilling to take the righteous path, favouring instead cowardice and submission to the imperialist agenda. I say to you only this: we will not be stopped. For all your carefully laid treachery against me, I have something you do not. The tide of history has already begun to flow. Sooner or later, you will all be drowned.

*Note found accompanying body of former Supreme Architect Gregor Malofeyev. January 17th, 2097.*

# 1 Dying Light

[Gassing more obvious?]

Autumn had come early to the city of Belyy Gorod. Trees which had until that morning been in full spring bloom were now barely half-covered, their surrendered leaves lying thick upon the ground. A hazy, ashen twilight hung over the city, turning the tall white facades a livid yellow.

‘BREACHING! All units take cover!’

Colonel Sokolov disembarked the top deck of the command vehicle, his boots landing together with a dry tramp. The rear of the vehicle swung open, and he positioned himself inside of one of the doors. Seconds later the ground shook in mighty concussion. Small pieces of smashed stone and glass began to rain through the canopy, dislodging trickles of dying leaves. A hundred metres away, two squads of forty troopers filed with rifles raised into the now gaping Ministry of Defence. Sokolov watched as the men and women of his brigade disappeared into the smoke. He would have preferred to have been in there with them. But there was still work to be done.

‘Units three to five, get your troopers assembling that cordon,’ he said to his gas-mask’s integrated radio. ‘I want all checkpoints covered with gunners in three minutes. Prioritize concealment; remain under foliage whenever possible.’

Muffled small-arms fire began to leak from the building behind them. Nearby, more BTRs were arriving, their battery motors whining as they pitched to a stop. Troopers burdened with ammunition belts and breathing equipment dismounted and sprinted for the tree line. Three sergeants began directing them into machine gun and antitank nests, while another guided the armoured vehicles into fighting positions, their front scoops ploughing up the thin soil into makeshift shields. It was a dance that Sokolov had seen many times before. He had trained them well, no doubt about it. Yet, seen now, it was clearer than ever how few they were: barely two hundred, against perhaps a thousand. Once the rest of the garrison started to respond, they could not hold out for long.

## 1 *Dying Light*

He stepped back into the command vehicle. Inside four troopers sat before screens, one operating the twenty-millimetre autocannon, the others monitoring the situational analysis engine. 'Are the spotters up yet?' he asked.

'One, Comrade Colonel,' the nearest replied. 'But the enemy is attempting a wideband jam.'

'Can you jump it?'

'I've got them cycling frequencies, sir. Should be able to get ahead of it pretty soon.'

'Good. What is comms saying about their response time?'

'They said about twenty minutes, sir.'

'Alright.'

Stepping out of the vehicle, he followed the twin strips of pulverised earth back to where they had entered the woods. There, beside the gravel path, was the young couple he had seen on the way in, lying face down on the grass. A pool of vomit surrounded one. They must have been too far from a shelter when the contamination alarms sounded.

Turning the man over with his foot, Sokolov saw the dog leash clasped in his hand. That explained it: they had wasted time searching for their animal.

He knelt, drawing from the man's inner pocket his personal terminal, and navigated to the news directory. It was as he had hoped. There was still nothing on the situation; the outlets were silent to a man.

Returning to the command vehicle, he raised his binoculars upwards, peering past the canopy. The nearest he could see was a kilometre or so; anything closer was obscured by the buildings flanking the square. Beyond that, though, the view was clear: blue rooftops rolled up and away, gradually giving way to the vertical greens of distant parkland, crisscrossed by tree-lined avenues.

They were halfway down one of the two great cylinders which made up Belyy Gorod. Each of these was four kilometres across and twice that long, rotating in opposite directions. To those within, the centrifugal force had all the appearance of standard gravity, allowing them to live as on Earth upon the inner layers of the cylinder. The topmost layer, on which they were standing, was lit with reflected sunlight, transmitted along the axis of the cylinder from the outside. With every passing moment, the warmth from the central emitters faded, their light being dyed a deeper red by the external filters.

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Sokolov refocused his gaze, spotting a line of vehicles approaching down one of the avenues. He increased the zoom, identifying a mix of police cars and armoured personnel carriers. The militia was indeed reacting faster than he had expected. But still too late.

'Sir, rec-1, 2, and 3 are online,' called the lieutenant from below.

Inside, the three screens now showed the feeds from the spotters, positioned earlier around the far side of the cylinder. Every few seconds a screen would melt to static, then recover as it cleared the jamming signal. One of the three was obscured by cloud, but the others were clear, showing a highly magnified, bird's-eye view of the Ministry of Defence building and surrounding gardens. The former was easy to identify: a fifteen-story block of fake marble, adorned with red hammer-and-sickle banners, its top a sharp spire. It dominated the surrounding streets and gardens, as impressive from above as below. This was an integral part of the design, given how most citizens saw it.

'Tactical overlay, please,' said Sokolov.

The lieutenant typed a series of commands into the computer, and a moment later a mosaic of green symbols blinked into existence upon the screens, shifting every few seconds as it was updated. Sokolov gazed at the displays, which showed the position of each trooper, their vitals, and what ordinance they were in possession of. He leant forward, calling up the stats for adrenalin, heart rate, and perspiration. The results were hardly surprising: they were afraid.

That was quite understandable. But Sokolov did not share the emotion. He no more feared for his existence than did the artificial intelligences inhabiting the computers before him. Perhaps if his troopers knew the glorious task for which they were giving their lives, they might also feel such serenity. But they would never know. All they understood was that the distant shapes coming down the slopes toward them had today become their enemies.

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'The building is secure, Comrade Colonel,' said the voice of Captain Kupets. 'We're making a start on the control centre door. Should be down in two-zero minutes.'

'Affirmed,' Sokolov replied. 'Expect my arrival shortly.' He switched to the officer band. 'All units, this is CV1. The objective is secure. Prepare to fall back

## 1 *Dying Light*

by squads. Unit Three, wait for my mark.' Then: 'Driver, back us to twenty of the breach. Gunner, begin laying down covering fire.'

In a moment the vehicle lurched backwards, shedding the leaf skirt it had acquired. All around, the air reverberated with the sound of battle, the rattle of automatic fire echoing down off the cliff-like walls of the headquarters. Rounds cracked through the air above the defenders, severing branches which fell in showers of beige and green. Every few seconds, the explosion of a rocket-propelled grenade shook the ground under their feet.

The rest of the city garrison had attacked from two directions: one column entering the government compound from the west, its armoured vehicles sending streams of direct fire high over the buildings, while a second approached from the south, along the flat axis of the cylinder. Sokolov had watched on the screens as the tiny black figures darted one by one into the square, slowly fanning out around the headquarters. Now, ten minutes later, they were surrounded.

Sokolov gripped the handholds as the command BTR wrenched itself over the terrain toward the breach. Two of the spotters were down now, destroyed by helicopter drones scouring the far side of the cylinder. The one remaining screen had almost a fifth of his troopers greyed out; a further fifth had labels indicating shrapnel or bullet wounds. Certainly, Kupets' report had not come a second too soon.

Before the vehicle had even fully halted, Sokolov was outside, his AN assault rifle raised. He gave the order to fall back, and an instant later the fifteen remaining troopers of Three Unit leapt from their cover and raced across the open grass toward the breach. Ten seconds later, Four Unit did the same. The incoming fire intensified, troopers falling as they ran.

Sokolov fired his weapon out towards the distant advancing shapes of their opponents. Behind him, those troopers who had reached the building began setting up their own machine guns, covering the retreat of their comrades.

'Five Unit, mark!'

The final band of the defensive ring scrambled to their feet and began weaving their way back towards the headquarters. They were half way when an agitated voice burst upon the officer band. 'This is Five Two to CV1, standing for Five Leader! Be advised I have sight of—.' Sokolov did not hear the rest.

The ground to his right exploded in a blinding flash, lifting him from his feet and tossing him sideways.

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He came to rest in a flower bed.

It was a second before he recovered his senses. His head-up display told him he had taken shrapnel in his right thigh. His rifle was gone, and his radio circuits disabled.

He looked up in time to see a second rocket impact the command vehicle directly, sending black smoke pouring from its rear doors. Out over the trees to the southwest soared the source of the attack: a Mi-10 reconnaissance drone. As Sokolov watched, hugging the heaped earth and stones around him, the thump of its rotors climbed above the other sounds reverberating around the square.

At a hundred metres from the building, the drone pulled into a hover, trees swaying beneath it, and began raking the ground around the wrecked command vehicle with its gun pods. Five Unit were caught in the open, their mangled bodies being thrown to the ground. For several seconds the onslaught continued, rounds burying themselves in the turf, nearby flower beds exploding in clouds of blue and yellow.

Then Sokolov suddenly noticed a sharp pain in his forehead. He started to feel his breathing become short. He felt for his oxygen hose and found that it had been sliced almost right through by a piece of shrapnel. Had his display been working, it would have initially told him he had less than three minutes to live. Now it was closer to two.

Had the job been done, Sokolov would not have cared about this development. He would soon be dead anyway. But too much still remained to be done, and too much could still go wrong.

The drone briefly paused its firing. Strewn across the grass were the bloody remains of Five Unit, all dead except for one trooper, who was cowering behind the burnt-out command vehicle. Then it recommenced, repositioning to rake the masonry of the headquarters.

Sokolov saw his opportunity and stood, limping his way towards the wreck, as small arms fire continued to crack overhead. His vision was darkening and his hearing fading as dizziness began to overcome him. The pain in his head grew steadily worse, and his eyes started to stream.

At ten metres from the command vehicle, the stranded trooper saw him and scrambled to his feet. 'Comrade Colonel!' he called, coming to help. Sokolov waved him back behind the cover.

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With a glance, he checked they were out of sight of the breach and surrounding windows. Then he drew his pistol and shot the trooper once in the groin. When he was closer, he put a second bullet into his chest, careful to avoid his breathing equipment.

With now-shaking hands he unscrewed the man's oxygen line, attaching it to his own mask. He drew several deep, controlled breaths, and as his vision and hearing began to recover he swapped his oxygen tank with that of the dead trooper.

He peered over the top of the hull at the drone, still hovering. It was closer now, its guns ripping intermittently into the masonry around the breach.

Then it again suddenly stopped. A few seconds later Sokolov was deafened by a screeching audio signal. He now noticed the two massive speakers affixed to the underside of the aircraft. In a moment the signal resolved itself into a voice, cutting through the sound of exchanging gunfire.

*'Comrades of the 75th Airborne. By order of Acting General Secretary Khrushcheva: stand down. Repeat: stand down. Your orders have been issued to you in defiance of the legitimate government authority. Your commanders seek to destroy the Soviet Union. They are traitors to the people. You are not. You have been lied to. Lay down your weapons immediately and you will face absolutely no—.'*

A rocket screeched from a window near the breach, striking the helicopter in its side. The machine was sent immediately whirling to the ground, whereupon there came a rending screech and flash of orange as it tore through the topsoil of the garden and into the steel deck below, exploding.

Sokolov took his opportunity, leaving his cover and limping the remaining twenty metres to the breach. Bullets followed him from their distant assailants, but none found their mark.

Two troopers pulled him up the slope of rubble. There was a cheer as he was guided into the cover of the building. 'You hear what they were saying sir?' one sergeant said. 'The guile of those bastards. Calling *us* the traitors.'

Declining medical attention, Sokolov ordered he be taken to the elevators, which were mercifully still in operation. The Ministry of Defence had its own internal fission generator and remained fully powered. He applied some nanotech gel to his leg.

A sergeant met him on the twelfth floor. 'Is the control centre breached yet?' Sokolov asked.

'Not yet, sir. Comrades Kupets and Barsukov are still trying to cut through.'

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Shall I take you to them?’

‘No. Inform me when they have access.’

‘Very good, Comrade Colonel.’

Sokolov reflected a moment, then made his way down the windowless corridor, navigating from memory. It was a mess: the carpets and plaster torn up, dinner-plate-sized pieces of floor punched through by grenades. Security and administrative personnel lay dead on the floor, the air above them damp with the smell of iron. No prisoners had been taken. Sokolov noted with satisfaction the efficiency with which his orders had been carried out. Several wounded troopers were being treated, nodding respectfully as Sokolov passed by.

Down both sides of the hall, the office doors had been battered in. One had been smashed hard enough to dislodge the brass plaque affixed to its surface, now lying face up under a thin layer of plaster dust. Sokolov cleaned it with his boot. *General Antoni Wozniak – Director of Defence*, it read.

He saw that the director was sat at his desk, pale flabby body leant back in its leather chair. On the oak desk before it was an unstoppered bottle of Siberian Vodka. Sokolov crossed the carpet and examined the label. ‘Very nice, Antoni,’ he said. ‘You are a man of taste after all.’ He set it down and filled a glass, walking to the nanotube-reinforced window.

‘To the old world,’ he toasted, gesturing outside.

In the distance, grey against the orange haze of the dying light, the enormous plume of liquefied sulphur dioxide continued its spray into the air. He noted the glitter of ice crystals around the breach, the result of the cooling effect of evaporation. The outpouring was unabated since they had first breached down into the lower decks two hours ago. It was there that was stored Belyy Gorod’s chief industrial good: liquefied Venetian atmosphere. This was processed into fertiliser and carbon nanomaterials and exported to the other colonies.

The gas now appeared to have mostly filled the cylinder, gradually poisoning the fauna and flora within. In every direction, Sokolov saw bare, discoloured trees; bodies littering the ground. Soon it would near enough resemble the planet itself.

He looked out at the city which had been his home for so long. It was to be a long night. But here as elsewhere, when the morning came, he knew it would be a better one. That was the promise he had made.

Down below, sea of shadowy figures flooded around the base of the building. The scene was lit with intermittent flashes of grenades, each accompanied by a

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dull thud, as the grounds were cleared of his men.

'They're through, Comrade Colonel,' said the voice of the sergeant from behind him.

Sokolov arrived to find the control centre door lying flat, blasted outward from its hinges. Beyond, through a short smoke-filled passage, was the brightness of the fire-command room. The two guards posted outside stood to attention as he passed.

The room was small: little more than a steel box, lit by fluorescent tubes, with every surface crammed with computers. Like all strongpoints, it was positioned at the very top of the building, thus as far as possible from any external strike against the cylinder.

Two of the computer chairs were filled, their occupants tapping at keyboards, while a third trooper stood a little way inside the door, massive arms holding his rifle ready. He, like the others, snapped to attention as Sokolov entered. 'Glad you could make it, sir,' he said gruffly.

Sokolov noted the gash in the captain's arm. 'You're bleeding, Barsukov.'

'Ain't bleeding yet, sir.'

Sokolov nodded appreciatively, then approached the other two men, a lieutenant and a captain. 'How long?' he asked.

'Not very,' replied the captain, squinting at the white text appearing before him.

'The codes are working then?'

'So far, but there's still two layers of verification needed before we can launch.' Kupets began typing as he spoke, his fingers flashing across the keys in intermittent bursts. He indicated the lieutenant. 'Pushkin is working on the safeties. There are a lot of those, as you'd imagine. But we're making quick progress.'

'Good,' Sokolov said. 'Soon we'll have done what we came here to do. The Grand Architect left us those codes for a reason. By his hand, we will finish what he started.'

The two men nodded in unison. 'Yes, Comrade Colonel,' they declared.

For the next several minutes, Sokolov paced up and down the hard floor in silence, periodically gazing over the shoulder of Lieutenant Pushkin. He was one of Kupets' men and a relatively new addition to the brigade. Even so, he had immediately caught Sokolov's attention; he was a highly intelligent, technologically gifted man, much like Kupets. On the back of his neck was inked the obtuse tick

## 1 *Dying Light*

of Canes Venatici, the constellation that was the symbol of their unit. Sokolov had no doubt that he would have made a fine senior officer, had fate not had different plans for them all.

As the seconds passed, the sound of muffled gunfire began to drift through the open doorway, mingling with the clicking of the computer banks. Soon there joined shouting and scraping as the remaining troops barricaded the nearby corridors. Through all this Kupets and Pushkin went on hammering at their keyboards, firing a seemingly endless sequence of commands into the dim depths of the station's Strategic Response Computer. Then, finally: 'Okay, we're in business.'

Behind Sokolov the holo-display flickered into life, a strategic map of the planetary system slowly materialising. At the centre was Venus, occupying two-thirds of the projection's volume, shaded a pale translucent white with grey latitude and longitude lines. About its surface were distributed several dozen triangles, coloured red, blue, and yellow. Further out, filling up the rest of the cuboid volume above the table, was a swarm of circles, straddling thin thread-like ellipses. These were in the same three tricolours, indicating hostile, friendly, and neutral or unknown. Belyy Gorod, one of the blue circles, pulsed with a white border.

'Targets, sir?' asked Pushkin.

'Set for all United States balloon facilities,' replied Sokolov. 'Air-mining, scientific, tourist; anything with more than one-hundred personnel onboard. One warhead each, full yield, airburst. What does that leave us with?'

Kupets examined one of the screens before him, mouthing some calculations to himself. 'Eleven rounds, sir.'

'Alright. Distribute them across targets of opportunity. Prioritize their solar collection network.'

'None on Houston, sir? Eleven could be enough to overwhelm their point defences.'

'That isn't necessary,' replied Sokolov. 'Our comrades outside know that total commitment remains their only way to avoid destruction of the Union, should these missiles leave their tubes. The navy will deal with Houston, just as they will with the bases on Mars and Luna. Then they will deal with Earth.'

Kupets nodded, inputting the commands. As he did, a series of powerful thuds shook the room. Pushkin looked up, glancing at Sokolov. For a moment their eyes met, then the lieutenant returned to work.

Something in Sokolov tightened.

## 1 Dying Light

One by one, the red squares in the holo-display became enclosed by their own blinking borders, tiny alphanumeric annotations appearing beside them.

'Trajectory calculations complete,' Kupets announced. 'Initiating final target verification. All missiles cleared for launch.' He removed his hands from the keys. 'Pushkin, open all silo doors.' There was silence. Pushkin remained still. 'Comrade Lieutenant,' said Kupets again, turning his head. 'Open the silo doors.' Pushkin still did not move. He sat, leant forward over his console, stiff as Lunar steel.

Slowly, Pushkin pushed off the desk so that his chair rotated to face them. In his quivering other hand was now visible a D1 fragmentation grenade, fingers pressed tight against the release lever. Around a finger of his other hand was the pin.

'What the hell are you doing Lieutenant?' growled Barsukov, shouldering his rifle.

Pushkin swallowed, not looking at Sokolov. 'I'm sorry sir,' he said. 'We can't do this. This isn't right. No future is worth what we're about to do.'

Sokolov sighed. This was most disappointing. If the man had planned this betrayal from the beginning, he might have retained some respect for him. Of course, he would likely have seen it. But this had been a last-minute decision; a loss of nerve, or a sudden pressure-induced lapse of perspective. Either way, it was weakness.

'We don't have time for this Pushkin!' Kupets spat, frozen to his own terminal. 'Open the fucking doors.'

Pushkin shook his head. His voice wavered. 'There has to be a better way than this. There has to be. Twelve billion people.'

Sokolov casually took his pistol from his holster and pointed it at the lieutenant. 'Don't!' he shouted, brandishing the grenade above his head. 'You shoot me and I let go, destroying the transmission equipment.'

'That grenade is too small to damage this equipment. If you had thought ahead you might have known that.'

He went to squeeze the trigger. Pushkin rushed to raise a hand in a last act of desparation. '*Is this what she would want, Comrade?*' he blurted out.

Sokolov paused. For some reason, his finger did not want to move.

'It's what I want,' he said through gritted teeth.

He forced his finger back, the gun spitting its cargo. The man crumpled for-

## 1 *Dying Light*

ward, the grenade dropping to the floor. He clutched his stomach. The other two troopers in the room dove for cover. A moment later, a deafening concussion convulsed every surface, smoke filling the narrow space.

Straightening, Sokolov examined the equipment. As he had expected, it appeared to still be operating.

'Finish it,' he snapped.

Kupets obeyed, rushing and seating himself at Pushkin's terminal. 'Opening outer doors now.'

Its previous occupant lay at the foot of the chair, dead, still bleeding both from the bullet wound and a federation of punctures caused by the fragmentation. His exposed skin was a livid, darkened red, burnt by the explosion. Sokolov crouched down, ripping the VDV badge from the body's arm. 'Where are we, Kupets?' he urged.

'Thirty seconds,' came the called reply.

'Fire as soon as you are ready.'

He turned away.

No sooner had he done so when the sound of nearby gunfire ripped through the open door. Barsukov instinctively brought up his weapon. The guards in the corridor had taken cover, emptying their rifles toward the far end of the corridor. Beyond, a single dark figure appeared, its arms lofting to its shoulder a heavy metal tube.

Time slowed almost to a stop. For a moment all that could be heard was the laborious thump of assault rifles. Then the distant figure disappeared, hidden by a flash. The projectile tore down the corridor, then through the command room doorway. Its rocket motor lit the walls as it entered, accompanied by a hellish scream. In a split second, it had cut between Sokolov and Barsukov, then over the top of Kupets, whose hand was mere centimetres from the launch command. Then, finally, it impacted the central computer terminal, where it exploded. For a brief moment, Sokolov saw the room turn white, his comrades vanishing before him. Then all was dark.

## 2 The Assignment

'Good morning sir, welcome to MacDonald's Gagaringrad. What can I get for you today?'

'Er, good morning.'

Makarov scanned his eyes over the dancing displays behind the clerk. He had been unprepared for how fast he would reach the front of the queue. 'I'll just have a tea and a... what is it? A Mac?'

'A Big Mac, Comrade?'

'Yes, please.'

'Of course. And will the tea be regular or large?'

'I'll have that large as well.'

With a few keystrokes, the prompt to pay appeared. Makarov forcing a grimace into the camera before him. *Makarov, Sergey Ruslanovich. Citizen Number: 68-7128-660*, flashed the screen. 'Happy birthday, Sergey,' congratulated the clerk, reading from the terminal. 'Would you like to take advantage of our complimentary 15% discount?'

'Erm, sure.'

*Account Deducted: 101.98.*

Several seconds later Makarov's order appeared beside him on the counter. 'Enjoy your meal,' beamed the clerk. 'And have a Great Day.'

'You too,' said Makarov. He collected the tray, hooking his suitcase precariously under one arm. At a nearby table overlooking the street, he sat to eat. Below, the usual stream of people washed by, the flow propelling them from shopfront to shopfront. Their young faces, wrapped in garish fashions of the terrestrial republics, trotted over chunks of boulders, handfuls of carefully sanitised Martian dust hauled up from the surface, waiting out their time in orbit. Through this colourful sea was visible the occasional local, standing out as much for their irritable stride as their drab, vat-spun clothing. One, a bright-faced young woman, was in the process of selling strato-diving lessons to a group of Red Fleet officers. It seemed that her pitch was succeeding, no doubt helped by the skin-tight pressure

## 2 The Assignment

suit she had donned for the task.

With an effort, Makarov forced his attention back inside, and to his reader. Taking out his pen, he began to work his way through the Design Safety Case, his comments inserting themselves into the document in red: *Rewrite this; this needs to be clearer; is there a timescale estimate for this?*

No sooner had he finished the second section, when the reader began flashing. He should have deactivated incoming signals, he thought. It was too late now.

Putting down the pen, he fumbled on the connection to his projection glasses. A moment later, the upright, slightly flickering form of Karl Dubrovski appeared before him, before teleporting into a sitting position across from him. There was a moment of silence, during which Makarov's avatar presumably carried out similar manoeuvres. Then: 'Afternoon Sergey.'

'Afternoon Comrade,' replied Makarov. 'What can I do for you?'

'Ah, not much. Just wanted to see if you had any thoughts about the DSA yet.'

'I'm just looking at it now, actually.'

'Ah well, anything so far? Just I'm trying to get any directives I can to the team before they clear off for the weekend.'

Makarov paged back through the document. 'Can't say I've found a huge amount to quibble with as yet. Maybe just a couple of things. For example, your guys wrote on page four that they're suggesting C261 holding cases for the main antimatter traps.'

Dubrovski searched on some unseen device before him. 'Gotcha.'

'Problem is,' continued Makarov, 'the C261's aren't technically rated for the vibrational values you cite on page 2. Not that it'll physically make a difference, but if De-Reg catches that they'll probably throw up a fuss. Could slow things down.'

'Huh. I thought C261 was given as a vibration safe option in the official component tables.'

'It is, but the DNS put in a slightly different standard last year. They won't accept as safety-3 anything less than a C261R. It doesn't make any sense, of course, but that's what they decided.'

'All right, whatever you say. We'll change it to C261R. Anything else?'

'Just phrasing. I'll get try to get it over by the end of the day.'

'Sounds good,' replied Dubrovski. The call ended.

## 2 *The Assignment*

Makarov reached again for his pen but found it now felt like lead. He had no motivation for the task ahead of him.

Fifteen minutes later, he was back outside, joining the procession moving northward. Seeing that a band of street performers was blocking his usual route back, he took a detour via Saltanova square, dodging the crowd photographing themselves against the famous column, and cut up Sosna Street, then across to the boulevard. Before long he was back before the tall glass of the Ministry of Ordnance and Energy Munitions.

To his surprise, he found the overseer of his section waiting at his desk. 'You realise that lunch is supposed to be thirty minutes only,' he goaded as Makarov set down his briefcase down and began unzipping his jacket.

'I'm sorry, Comrade Overseer. It's—'

'Don't sit. You're wanted upstairs.'

The overseer, referred to universally as Baldy, was not famed for his jolly demeanour. But at this moment, he looked almost beside himself with agitation.

'Upstairs?' Makarov asked. 'Where upstairs?'

'Floor twelve.'

Makarov froze. 'Floor twelve? Have I done something wrong, Comrade Overseer?'

'I was hoping you could tell me that,' Baldy said acidly.

'I can't think of anything.'

'Well, something's obviously fucking happened. So I'd get thinking if I were you.'

Neither spoke as they rode the elevator up. All the way, Makarov racked his brain for something which might justify this: some overlooked mistake he might have made, some politically unwise comment. But he could think of nothing.

The elevator opened with a ding, revealing the ministerial foyer. The secretary waved them through. Entering the office, they found it empty, two chairs arranged before the enormous desk. A still-smouldering cigarette lay in the ashtray. Makarov tried to absorb as much of fumes as he could. After gazing around a moment, they settled noiselessly into the seats.

'You really have no idea what this is about, Comrade Overseer?' Makarov whispered imploringly.

## 2 *The Assignment*

‘Shut the fuck up,’ Baldy hissed.

They went on waiting in silence. As Makarov stared at the edge of the desk, he was unable to prevent himself from recalling Ogurtsov, the old Grade 1, who was now serving out his time down on the surface. He had made the mistake of being the last to sign off on the new GYG explosives lifting crane. Six months later, one of the first models had collapsed, killing six workers.

Was his fate to be the same: Sent down to blasting duty, to the endless, inescapable dust storms and bone-destroying low gravity?

An apparent eternity later, the Minister for Ordinance finally arrived, striding through the open door. Baldy stood as if he had been electrocuted, his chair almost toppling behind him. Makarov followed him up. ‘Comrade Minister,’ they both said breathlessly. Makarov had only ever twice seen him in the flesh.

Minister Brantov rounded the desk and sat, indicating for them to do the same. He picked up a stack of papers on the table, looking through them with half-interest.

‘This is your man, is it?’

‘Yes, Comrade Minister,’ Baldy replied, his voice displaying his uncertainty.

Brantov continued reading, periodically glancing up at Makarov, his expression blank. The latter remained still, continuing to stare at the varnished desk. For all he concentrated on the complex patterns of the wood, he could feel the end of his career careening toward him.

Brantov finally closed the file and slid it back across the desk. ‘Not bad,’ he said matter-of-factly. ‘Good performance scores. Good technical record. But less experience with field diagnostics than I had desired. You are sure you want him to be your recommendation for the Earthbound?’

Baldy hung for a moment, frozen. Then all of a sudden he seemed to understand.

‘*The Earthbound*, r— right,’ he stuttered. ‘Yes,’ he went on, gaining fluency. ‘He’s done the most work with the KnK’s out of any of the candidates. And, uh, any knowledge gaps we estimate can be filled on the trip. He’s also the was the only candidate with no dependents.’

Brantov peered inscrutably over his glasses, causing Baldy to shrivel. ‘Though, of course, if you’re not satisfied, Comrade Minister, I can come up with other alternatives. Let’s see—’

## 2 *The Assignment*

'No. There's no need for any of that. I will defer to your judgement, as leader of the team. Obviously, you know that should it prove inapposite, you will bear full responsibility.'

Baldy gave a barely perceptible nod, saying nothing.

'You had better brief him then,' said Brantov, passing him an envelope.

'Of course, Comrade Minister.' Baldy briefly examined the contents of the envelope, then pulled free a sheet of paper. 'You need to sign this,' he said, passing it to Makarov. 'It confirms your agreement not to share any details of the brief with anybody unless they have the appropriate clearance, and then not unless it is expressly necessary for the success of the mission.'

Makarov, who was still in a state of ossified confusion, took the sheet. He allowed himself a defiant half-minute of reading, ignoring Baldy's glare. Then, reluctantly, he signed. Immediately the document was snatched away, another taking its place. Across the top of this one was stamped: SECRET: MSSR EYES ONLY. Makarov read as quickly and carefully as he could manage, his heart again sinking. Then he laid the paper down.

'Do you have any questions?' asked Brantov.

'No, Comrade Minister.'

'Good. Then please confirm that you have understood the brief.'

Makarov took a deep breath, still absorbing the change in his circumstances. 'Ordinance package supervision, sir. Sixty-four KnK-7 Goltz charges to Low Earth Orbit. Sunward transit via-' He glanced back at the paper. '-Earthbound cyclor station. Return via Earth-Mars liner. Subjective mission time: five months.'

He knew that he ought to be relieved. But he was unable to purge the bitter emphasis from these last two words. Five months living aboard the filth of a cyclor station. No real-time communication, no fresh food. Not even the escape of hibernation. It didn't make sense; this was a job for a lowly technician, not a fully certified design engineer like him.

Brantov nodded. 'And do you accept it?' Another false question.

'Yes, Comrade Minister. I am honoured to be selected for the task.'

Brantov leant back in his chair. 'Excellent,' he said. 'Now let me attempt to impress on you the reason that I have chosen to send someone of Grade 2 status, and why I wished to see to this matter personally. You have both, I assume, heard of the new arms limitation treaty our great Comrade Khrushcheva will be presenting to the UN in several months?'

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They nodded. 'Well, if that treaty goes through, this Design Bureau is going to be up shit's creek without a paddle. Two-thirds of our funding is contingent upon supplying warheads to the Red Fleet, and that's all but going to disappear. So, if any of us want to still have jobs next year, it's vital that we demonstrate that we are integral to the industrial strength of the Union.'

He projected a finger into the table. 'In your case, that means showing those dickheads running Lunar Affairs that they need *our* Goltz technology for their mining operations. Not Russian, not East German, certainly not bloody American; *Martian Bolshevik*. And, as package supervisor and coordinator, it is your jobs,' he wagged the same finger between the two of them, 'to make sure that this operation goes as smooth as is humanly possible. Have I make myself clear?'

He had.

'Good,' he finished.

Makarov kept his eyes fixed on the edge of the desk before him, careful to do nothing which might now disturb the precarious situation. He could still not shake the feeling that he was being punished for something. For, despite what the minister had just said, it simply didn't make sense to send a Grade 2 on this kind of job.

'Comrade Zimmermann.' Brantov turned abruptly to Baldy. 'You may go about your duties now.' Baldy was still a moment, then stood, his legs apparently understanding the command before he did.

'Yes, Minister,' he said. 'Shall I wait outside?'

'No. I'm sure Comrade Makarov can operate the elevator himself.'

'Very good, Comrade Minister.'

Baldy shot Makarov a final, confused warning glare, then retreated. The secretary closed the door behind him. Brantov waited several seconds, eyeing Makarov carefully, as if making some kind of final judgement. Then, as the sound of the elevator retreated, he pointed to a drawer in the desk.

'Open that and take out the file inside,' he commanded.

Makarov did so. And shortly, things became clear.

### 3 Sunward-Bound

According to the CCCP Official Textbook for Secondary History, the colonisation of Mars began on May 27th, 2008. It was on this day that, at eleven-fifty-four Moscow Time, Cosmonaut Amaliya Saltanova and her crew of two screeched into the skies over the red planet. Their journey had taken them nine months and through 140 million kilometres, a solar flare, and two life-support malfunctions. But now, with that behind them, they had arrived.

Everyone knew the risks. The Soviet Martian program had shocked the world with its speed, moving from announcement to launch in just three years. But this achievement had come at a cost: the heat shield, all that stood between them and vaporisation, had not yet been fully tested, and the guidance programming had required no fewer than five in-flight patches. Of course, the engineers gave assurance that their designs were sound. Yet, as the enormous face of the red planet bore down upon them, the three souls occupying that lander must have been making their peace with death, a required skill for any cosmonaut of that age.

When confirmation of the successful landing came, the celebrations were relentless. In Moscow, the parades and festivals lasted well over a month. The Soviet Union had done it: they had won the race to Mars. And those three words: 'Here we are', were to embody this achievement for all eternity.

In their first week on the surface, the Saltanova expedition made several groundbreaking discoveries. It turned out that there was present active methane in the Martian atmosphere; that there were signs of limited tectonic activity; and, most impressively, conclusive evidence was found of liquid water buried beneath the surface of the planet. Over the months following, their portfolio of findings only grew. The mission was, by anybody's standards, an unalloyed success. By the time the cosmonauts blasted back into space, there was already talk in the Kremlin of a second expedition.

Nonetheless, it would be a further eight Earth years before Mars again felt the tramp human boots on its face. This time those boots would be American, there

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with the intent to construct the first permanent base. Still reeling from its defeat in the only real Space Race, and determined to be the ones to capitalise on the discoveries made by the Saltanova Expedition, the United States spared no expense on the project. The arrivals brought with them bulldozers, smelters, a miniaturised nuclear reactor: all that might be needed to carve out an existence in that dry, dust-choked wasteland.

And carve out an existence they did. They thawed blocks of regolith for their water, melted exposed meteorites for their iron and nickel, and sucked from the atmosphere the carbon and oxygen needed for their organics. Slowly, and not without tragic mishap, the base grew, and that group of two-dozen men and women began to see the empty planes stretching beyond their windows as another home.

Those distant planes were not to remain empty for long, however. The Soviet government too had upgraded their plans to include a permanent base. In 2022, they landed with a roster of equipment and personnel at least as impressive as that brought by the Americans, establishing in the Hellas basin, almost half a planet away from their rivals. Then, four years later, came the Europeans. Then the Indians. By the mid-2030s Mars had a population of almost two-hundred, spread across five bases, and seven space agencies.

Yet, despite what their various governments claimed, these individuals could not truly be called colonisers. Stays were strictly temporary, even in the case of death, and procreation was banned. People arrived, and people went. After their initial spurt, the bases' growth quickly tailed off. In 2039, the Martian population, consisting almost entirely of scientists and their support staff, reached three hundred. And there it more or less stayed.

Part of the reason for this was the planet itself. Everyone had known Mars would be hostile, but they underestimated just how inhospitable it would turn out to be. Its gravity, at one third of Earth's, was too weak to prevent physical degeneration over long stays, no matter how much exercise one did. And its day of 24.6 hours was too long to support normal human sleep cycles, leading unavoidably to chronic fatigue and psychological deterioration. Furthermore, it lacked several key life-sustaining elements, not least of which was nitrogen.

Some of these problems were mitigated by the move toward rotating orbital bases, whose crews operated on the surface in shifts. But while these were a necessary improvement, they proved exorbitant to construct and maintain. And for all their attempts at in-situ resource utilisation, each still relied on a constant

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stream of resupply from off-planet.

In return for this expense, the people of Earth reaped little material benefit. Any minerals or ores present on Mars could already be found in greater abundance on Earth or its moon. More efficient farming, along with reclamation projects in the desert and sea, had made living space at home more plentiful than ever, while orbital solar shades and nuclear power mostly halted worries about climate change. Even that sorest of all subjects: asteroid impact, had ceased to agitate the public mind after the successful Global Defence Network test of 2040.

This left Mars with just two exports: science and prestige. And as the decades passed and public interest waned, the value of each of these steadily declined. After years of searching with no success, and trillions spent, one by one the exobiology departments of the world concluded that Mars really was bereft of any indigenous life. These admissions proved the final straw. Following the withdrawal of the biologists, in 2048 Mars' population for the first time declined. It did the same the next year, and then the next. To many, it looked that the Martian experiment was finally coming to an end.

But their lamentations were to prove premature. For there was a third resource present on the red planet, one more valuable than any mineral or precious metal that could be extracted. This resource was isolation. Out there, over those empty red dunes, existed the possibility of a life un-lived by any human in ten generations: a life beyond the stifling reach of Earth's governments and their centuries of baggage. To countless eyes, that spark in the sky became the promise of a world made in their own vision.

Yet, it was only as the middle of the century arrived that these dreams became possible. The industrialisation of cislunar space, ongoing now for four decades, had finally made shipment to Mars cheap enough for it to be within the reach of private fortunes. At this point, it suddenly became feasible for mere groups of individuals to assemble the materials needed for a colony there.

And so the floodgates opened. First to go in 2052 was a society of orthodox Christians. Two-months later, the first Martian human in history was born. Next was a Hindu commune. Then an aged Sheik and his entourage. Before long, three or four pilgrim ships would be arriving per launch cycle, and in early 2065 the Martian population surpassed twenty-thousand.

To the established nations of Earth, it rapidly became clear they could no longer ignore the red planet. The lines now being drawn on maps meant something,

### 3 Sunward-Bound

deciding borders which might last a thousand years. If they were going to avoid being left behind, it was necessary to take the lead.

In few places was this imperative felt more acutely than in the Soviet Union, that self-proclaimed vanguard of Martian colonisation. The USSR had been among the first nations to cut funding to the Mars project when interest had waned, choosing instead to strengthen its settlement of the Pacific. As a result, it now found itself with only two bases, to the Western nations' five.

It was into this crisis that Gregor Malofeyev made good his ascension to Party Leader. As his first act, he implemented his solution to the Mars problem. All gulags, bloated from his prior reforms as Minister for Internal Security, were now to be emptied and their contents sent to the red planet. This new state would have a population large enough to dominate any future development of the red planet. The only question remaining was how to transport so many people, so quickly to their new home. To that end, construction was announced of a new line of super-carrier cyclor stations. The first of the class, *SS Sevastopol*, was completed in 2070. A year later, it took aboard its first cargo of souls. Thus it was, in that cramped, humid air, that began the first days of the Martian SSR.



The day had arrived. Makarov awoke early, squeezed a last few things into his bulging travel case, then set off for the street. It was still dark outside, the central emitters giving off their nocturnal milky-white glow. A slight breeze was shifting the layers of fallen leaves over themselves.

He managed to get an entire car of the monorail to himself. That was just as well. Given that it had been over a year since he had last experienced microgravity, he expected the transition would be an uncomfortable one.

The train wound its way northward, picking up more bleary-eyed passengers as it went. *Seat-belts On*, flashed the sign at the end of the compartment as they pulled out from the penultimate station. Soon after, they met the hemispherical end of the habitation cylinder, and the track began sloping smoothly upwards, following the surface. Before long they were climbing at close to vertical, the electric motors whining with the strain. Makarov could immediately feel himself lightening in his seat.

The nausea arrived right on cue: that punishment issued to any cylinder-dweller who spent too long without stepping into the non-rotating sections. This was why

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all schools in the city forced their pupils to play gutterball twice a week. Makarov had half-hoped that the pills would be enough to save him. But clearly, the laws of physiology were not so easily bent.

Attempting to distract himself, he fished the two Earth-bound tickets from inside his coat pocket, first examining his own, then that of the passenger. A Technical Counsellor: that had been what Brantov had called her. A secondee from the research division, joining him to offer support to the mission, should it be needed.

'I expect you to treat her with all the propriety and respect that her posting demands, and to keep well away from her at all other times. Do I make myself clear, Comrade Makarov?'

He had made himself very clear. It explained everything. That was why Makarov was being sent, rather than a technician. By classing the task as Grade 2, they could justify opening up an executive travel slot to Earth. And a Grade 2 project required a Grade 2 engineer to present in-person at all times. In short, the only reason he was there was to achieve a bureaucratic trick.

Makarov gazed at the name on the ticket. Miss Nina Gerta Vogel. Age: 32. Organisation: Ministry of Ordinance and Energy Munitions. Purpose of Travel: Work – Task Ref. 2101F33. The documents had arrived at his desk the previous week, proving she had worked at the Ministry for four years, and that her presence was vital for the mission, all stamped with the ministerial seal. It was a professional job, to be sure. A textbook spray-on.

Since the early days of the MSSR, these had been a feature of government assignments. Spray-ons were individuals who were allowed to pose as members of the work team in order to obtain a transport pass somewhere, usually Earth. Spray-on uniforms, as they became known, were given out as a kind of bonus, or gifted to the approving official's friends and family, thereby allowing the upper echelons of Martian society to ignore the strict off-world ticket lotteries most citizens had to abide by.

Yet, there remained something a little strange about the whole thing. What was odd in this case was the quality of the spray-on. This was, after all, Maximillian Brantov, probably the fourth or fifth most powerful man in the MSSR. Whoever this Vogel was to him: daughter, friend, lover, he would surely have had no difficulty manufacturing a place for her on one of the new high-speed liners or sleeper ships. Instead, he was sending her on a five-month cyclor ticket to Earth, with no hibernation.

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Not that it mattered. Makarov had more important things to worry about. He had had to leave his home, his work, his plants. For what? Nothing. All so that some spoiled elite brat could visit Earth for the whatever-th time. The waste of it.

The monorail drew into the final station, a ring-shaped housing circling the axle of the cylinder. As it halted, the last of the coriolis force disappeared, and for the first time, Makarov found himself completely weightless. The change was accompanied by the usual stab of vertigo, which was hardly helped by the sight of the city sitting off a kilometre below in every direction. Focussing himself, and with a growing heaviness, he set off for the shuttle bay.

Vogel was waiting for him just inside the security barriers, several large cases hovering by her side. She was a tall woman, blonde, several strands floating about her. Pretty, too, Makarov thought. But that was a given, wasn't it? Be it by stem-cell therapy, or at the point of a laser, ugliness had long ago been purged from the ranks of the Upper Party.

He brought himself to a stop before her. 'Miss Vogel?'

She nodded. 'You're Mr. Makarov, I take it?' she asked. She spoke in a slightly odd way, the words coming from the corner of her mouth.

'That's me.'

She smiled, seemingly relieved. 'Oh good. It's lovely to meet you, Comrade.' She extended a slender hand, which Makarov shook wearily. Vogel's smile faltered for a moment, then she glanced about theatrically. 'For a minute I was worried you might be spaceport security,' she said in a low voice.

Makarov gave a humourless smile. 'We had better get going, Miss. Vogel,' he said, gesturing toward the gate.

Their tickets and papers were accepted without question; hardly a surprise, but Makarov was thankful for anything at this stage. They waited as they and their luggage were x-rayed, and a biometric assessment carried out. Eventually, they were given their boarding tickets and nodded through.

Shortly they were making their way aft through the transfer shuttle's passenger compartment.

'Here?' Vogel asked, gesturing to a pair of empty seats.

'Sure,' replied Makarov.

They stowed their luggage and strapped in. Makarov immediately occupied himself reading a technical report. As they sat, more passengers floated past,

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chattering amongst themselves. They were entirely Terrans, by the sound of it. Somewhere far down the compartment, several children were giggling.

Makarov settled into the plastic, reader perched before him. Through the speakers above his head trickled the soothing voice of Viktor Veronin from behind his news desk in Moscow. To his right, Vogel sat quite still, her gaze directed out of the window. Makarov glanced briefly past. The face of Mars dominated the sky. Out in the starless black beyond, one spec glowed almost painfully brightly. This was the cyclor station, approaching them from their lee.

Shortly there was a thump, and a pulling sensation as the shuttle shunted itself away from its birth. The circles of sunlight cast by the windows shifted across the upholstery as it brought itself about.

*'Please remain in your seats and stow all loose items,'* requested the head steward through the public address system. *'We are about to begin our main transition burn to The Martyrs of Córdoba.'*

The cabin quietened slightly, then a distant whooshing sounded. Far away at the rear of the shuttle, the six nuclear engines throttled up, accelerating the long, cuboid craft along a line parallel to the sun. Makarov felt himself pushed back into his chair with a little under Mars gravity.

The steward announced that the burn would last approximately half an hour. By that time, the small, crowded vessel would be on a trajectory to Earth. With no further intervention, they would arrive in five months. Unfortunately, by then the occupants would all be dead, their supplies of water and air having been exhausted in the first week of travel. Those who survived longer than this would soon succumb to the inexorable stream of radiation penetrating through the thin walls of the craft.

Makarov continued his reading.

Finally, the burn ceased. Vogel turned away from the glass, and rummaged inside her carry case. To Makarov's surprise, she produced a book. A real, wood-paper book, by the look of it. Despite himself, he found his eyes torn from his reader to it as she began leafing thoughtfully through the pages.

Then, without warning, she glanced across, Makarov retreated hastily back to his report. They sat silently for half a minute. Then, suddenly, she spoke, her tone disbelieving. *'Did you know, that the ancient Egyptian religion had over two-thousand gods? Two thousand. Can you believe that?'*

The comment took Makarov by surprise. He looked across. *'What's that, Miss?'*

he asked.

Vogel repeated the remark. 'How on Earth do you think they kept track of all of them?'

'That's a lot,' Makarov replied measuredly. He sensed he should say something. 'What, uh, book is that?' he asked, nodding to the volume.

Vogel held it up, showing the cover. It was written in German. 'From Narmer to Nectanebo,' she translated. 'A Comprehensive History of Ancient Egypt.'

'Ah,' said Makarov hesitantly. 'You're interested in ancient history then?'

'Well, not normally. But this one has been gathering dust on my shelf for years and I thought it was about time I actually tried reading it. Turns out its actually all quite interesting.'

'Looks pretty old.'

'Yes. It used to be my father's. He managed to bring it with him when he first decided to come to Mars.' She flicked to the first page, where was folded a piece of ordinary poly-paper. 'There's quite a few old German words which I can't understand, so I write them down so I can look them up later.'

She disturbed the paper, and Makarov saw that behind it was tucked a cylindrical, silver cosmonaut's pen. His eyes instantly fixed on it. 'You like it?' she asked, fetching it out. 'It writes in zero gravity.' She demonstrated with a squiggle on the poly-paper.

'Yeah, I used to have one, actually.'

'Oh really, what happened to it?'

'I... lost it.' Makarov was silent a moment, his mind far off. Vogel eyed him sympathetically.

'Is that for the monitoring assignment?' she asked. She indicated the document on the reader.

'Sort of. It's background reading.'

She craned her neck, examining the diagram. 'Ah, the old KnK-7,' she remarked. 'So that's what we're carrying.' She saw Makarov's look of surprise. 'Oh,' she faltered. 'I guess you wouldn't know. I actually work at the Ministry as well. Not in safety, though, like the thing says. I'm in the physics department.'

'Really?' replied Makarov. A thought occurred to him, one which he was surprised had not already crossed his mind. 'This might be a stupid question, but I don't suppose you're any relation of Aldan Vogel, are you?'

Vogel nodded. 'Yes, that's right. He was my father, actually.'

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Makarov realised the mistake he had just made. He had forgotten that the old astrophysicist had just passed away. Pravda had only briefly mentioned it in its science section. 'I'm sorry,' he said haltingly. 'I didn't mean to—'

'No, no. It's alright,' Vogel assured him, though a note of sadness sounded in her voice. Makarov looked at her. Now that he had seen it, the resemblance was really quite arresting. They had the same face shape, the same piercing green eyes. And the way she spoke: that same calm, considered, slightly impeded way that each syllable was uttered.

'You knew him?'

Makarov shook his head. 'No. But I used to watch a lot of his stuff. I always remembered his series on black holes being really well explained.'

Vogel smiled. 'I liked that one too.'

She returned to gazing out of the window, relative silence returning. Makarov could feel something playing on his mind, though he could not work out what.

'I suppose you must think it's pretty strange,' she eventually said. 'Me getting the ticket I did, I mean. Rather than one that lets me hibernate.'

Makarov indicated that the thought had occurred to him.

She nodded vacantly. 'I'm not sure that I even know the reason myself. It's just something about hibernation... I suppose it's irrational, given the details of the process, but I was afraid that I would just wake up and have already moved on. Then he would be really gone; I would have lost him all over again. At least now, as bad as the pain is, I get to spend a bit longer with him.' She gave him a thin smile. 'Does that make any sense at all, Mr Makarov? Or do I just sound crazy to an engineer like you?'

Makarov was silent. It did make sense. In fact, it made more sense to him than anything he had heard in a long time. But as he looked at her, her quietly optimistic expression, the book between her hands, he felt that sense of danger become overwhelming.

It took only an instant for his mind to jump into action, using the mental control exercises he had learnt all those years ago. He thought of the ticket this woman was squandering, the three or four people she was depriving by her waking presence. He focussed on the privileged, entitled twang to her accent, imagining her at her inner party dinners, while the workers of Gagarinograd toiled in the under-city, or down on the surface. And in only a second, he could feel icy resentment return to his chest.

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'It's your ticket,' he said coldly. 'You can do what you like with it.' He returned to his reader.

'Oh. Okay,' Vogel said smally.

In half an hour, *The Martyrs of Córdoba* had developed from a spark to an object in itself, with width and length. Makarov knew that it was at least two kilometres across, but at this range it still looked like a tiny wire model, able to fit in the palm of one's hand.

Gradually it grew, invading more and more of the inky black sky before them. Soon Makarov could make out the components clearly. By far the most prominent feature was what must be the habitation disk: an enormous construction with roughly the dimensions of a coin. From its centre projected a tall skinny tower, which was kept pointed exactly towards the sun. Out of behind the disk extended four spindly arms, each stretching twice as far as the edge of the disk, culminating in a squat cylinder. Both the disk-tower construction and the cross formed by the arms were rotating, though in opposite directions. This was of course to maintain a total angular momentum of zero.

Yes, this was indeed a Sevastopol-class, thought Makarov. Even after all this time, he recognised it distinctly. The memory made him shiver involuntarily.

In ten minutes, they had passed into the lee of the station, now able to see the darkened shapes of the utility modules and the dock section, all shrouded in the enormous shadow of the disk. The dock was the only part of the station not rotating.

The shuttle aligned itself with the primary attachment port on the dock, then jettied gingerly towards it. In the time it took Makarov to put away his reader, the darkened rear of the disk ate the Sun completely. For the first time, the cabin was plunged into relative darkness, the only external light coming from the remains of the corona and the dull luminescence of the station's enormous waste heat radiators. As his eyes adjusted, Makarov could now see the glow of the other shuttles, all already burning their way back into Mars orbit. Far below them, the planet receded by the second.

A final shunt from the reaction control system brought them to a relative halt with the attachment port, and an insectoid arm extended, its mandibles claspng the shuttle about its neck and bringing it the final few meters. People were already unbuckled and retrieving their suitcases when a guttural thunk followed by

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hissing announced the connection.

Little time was wasted in disembarking them. Every minute that the shuttle and her crew spent there increased the fuel they needed to get back to Mars. The moment the pressure equalisation was complete, the doors swung open and a dozen extra stewards filed in and began encouraging people to forward. Makarov and Vogel joined the steady procession, heading out across the gangway, then into a large atrium inside the station. A honeycomb of security gates manned by a single officer barred their way.

No sooner had they passed through when Makarov was intercepted by a technician, separating him from Vogel. He followed the directions he was given, finding the door labelled *Oficina de Carga / Cargo Bridge*. There, amongst raunchy posters and air brown with cigarette smoke, he watched as the eight black crates under his jurisdiction were unloaded from the shuttle. From there, they were winched forward and placed in the vacuum hold. The young astronaut operating the arm appeared nervous, handling each as carefully as one might a carton of imported chicken eggs.

Makarov, who was keen to get back to standard gravity, assured him that the KnKs were the safest form of relativistic explosive the Soviet Union produced, and that such delicacy was not necessary.

As he signed off on the safety declaration, the team moved on to the rest of the containers affixed to the outside of the shuttle: stacks of steel lathing blanks, rolls of dried food, man-sized bars of silicon, enormous tanks of liquid oxygen. Some of these, like the silicon, were bound for Earth. But the rest was for the station itself, items which would sustain it for its next long voyage around the sun. In the spaces left on the outside of the shuttle were placed great cuboids wrapped in thick protective film.

Makarov found the main atrium was now empty, the stewards and officials having boarded the shuttle for final departure. Taking in the silence of the large space, he let the moving handrail carry him sunward, through the bearing channel where the dock met the rotating habitation section, and to the elevators located at the centre of the disk. A gaggle of passengers were still waiting at one of the spokes, chattering in Spanish. Makarov guessed that they would be taking one of the two shuttles headed to Ecuador when they arrived at Earth.

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It was a relief as he rode down and gravity again overcame him. Then, after fighting his way through corridors crowded with passengers and staff, he found his cabin. It was small and lightly furnished, but comfortable. A small set of windows looked out into the green interior of the disk.

In the common area behind, more windows looked out of the rear of the disk into space. Makarov sat, gazing out at the spinning field of stars. It was more than a little nauseating, but nothing compared to what he had already tolerated that day. Near the centre of his vision, Mars orbited inexorably, taking about forty seconds to leave and return to the same point. Each time it did, its glowing face appeared to be slightly smaller. By now, Makarov could cover it with an outstretched thumb. He would not see his home again for ten months.

High above, like a parasite which had drunk its fill, the shuttle released its mandibles from the non-rotating dock section. With a flash of its warning lights, it began to withdraw, accelerating under the force of its manoeuvre thrusters. At three kilometres distance, it began to turn about and soon after a painful glare announced its return burn to the red planet. Makarov watched enviously as they slipped away, back to civilisation.

## 4 The Ecuadorians

The air was thick, the humidity weighing down like a blanket as Makarov descended the outdoor stairs to the open deck. Thankfully, the solar reflectors two hundred meters above his head broadcast only a thin, attenuated grey light, simulating an overcast day. The constant rising and falling screech of insects competed with the party-like clamour of voices; judging by the number of rectangular tents still occupying the grassy area stretching below his window, about half the passengers had still to be hibernated. Nonetheless, five thousand in the six hours since the last shuttle departed was an impressive rate of progress.

The middle fork of a gravel path led him away from the stairs and towards the wall of green enclosing the thin strip of grassland. He again checked the directions slip he had been given and convinced himself that he was going in the right direction. Soon leaves were hemming him in on all sides. Makarov did not recognise most of the species of tree: they were clearly tropical, barks of red, yellow, some almost purple twisting up to form a dense canopy near above. Many were dead, apparently intentionally fallen, their trunks forming an alien landscape from which sprouted moss and fungus formations hardly less impressive than the forest itself. All around, groundwater hugged the pulverised wood, lapping gently back and forth from some unseen pumping mechanism. The smell was almost overpowering in its richness, a cacophony of putrid and floral scents.

After a few minutes, the path turned to a rough bamboo walkway, traversing the soaked ground below. Makarov eyed the slats carefully before stepping onto them, finding it hard to believe that any structure could survive in an environment this corrosive. As he crossed, something non-insectoid splashed in the water below, leaving a vortex of oily green and black behind it. Makarov found himself quickening his pace slightly.

Before long the canopy receded, revealing his destination before him: a low, metal building jutting out on stilts from the vertical wall of the disk. Crossing the springy earth, Makarov climbed the open metal stairs and entered through a side door. Confronting him was an office-like area, desks and lounge chairs distributed

#### 4 *The Ecuadorians*

over a carpeted floor. The sound of voices issued from what he presumed was the conference room.

‘Ah, Comrade Inspector Makarov, I presume,’ said a man in the grey uniform of the Soviet Civil Admiralty as he entered. He was a small, bald man, with a grey moustache. He introduced himself as the captain, extending a hand.

Makarov shook it and sat, receiving nods from the other grey uniforms along his side of the table. It was clear that his invite to this handover meeting had no doubt been purely a courtesy. Admiralty protocol ensured that his Grade 2 civil level translated into officer status, regardless of the relevance of his skills to the mission of the craft. Nonetheless, Makarov had been determined to make an appearance.

Arranged along the far side were what Makarov could only assume were the Ecuadorians, variously clothed in creased brown and tan overalls. They too welcomed him.

‘Are we waiting for anyone else?’ asked the captain after another attendee arrived.

‘Just my husband,’ said the Ecuadorian governess, looking around. ‘He and our new temporary quartermaster are resolving an issue bringing inside a shipment of leeches. They should arrive soon, though.’

‘Leeches?’ retorted a woman whose badge said she was the signal officer. ‘Is that what you’re planning on doing with the passengers?’

The governess laughed. ‘Don’t worry. They will only prey on earthworms. Our naturalist in Bogotá believes that they will help to stabilise the salt content of our top horizon.’

The captain swivelled in his chair. ‘I heard that last cycle was your best soil crop yet,’ he said nonchalantly. ‘What was it, three hundred tons dry?’

‘That’s right. We were very pleased. Apparently, so was your Ministry of Agriculture; I hear that they are using it in their Hellas colony to grow bananas.’

Makarov began to recall what he had read about the agreement between his government and that of the Ecuadorian Free People’s Republic, made when they had co-constructed the station two decades prior. For the five-month section of its orbit that *The Martyrs* travelled between Mars and Earth, it was designated a USSR passenger craft, and as such was under the control of the Civil Admiralty. However, for the remaining twenty months of its cycle, it was a semi-autonomous Ecuadorian territory, with the right to buy and sell goods to any polity on the

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central government's whitelist.

'Ah good, here they are,' said the captain.

Governor Bueno had arrived. The enormous, heavily overweight man strode boldly in, supported by two walking sticks and a young assistant. His overalls bore a row of medals on the bulging chest. 'Welcome everyone,' he said in a thick accent. 'Welcome welcome. Forgive our lateness. This is Comrade Señorita Sánchez, our new quartermaster until Earth.'

Following him was a woman in her late thirties, dressed in an orange pressure suit. Her two dark eyes assessed the room from beneath a fringe of jet-black hair, a pair of bright red lips presenting them a smile.

'Hello everyone,' she said. 'Sorry for the wait. Those leeches really did not want to come in.'

With the two seated, the meeting commenced.



With an effort, Bueno stood. 'I formally surrender to you,' he boomed, 'thereby relinquishing all authority and control and submitting myself to your mercy and judgement.' There was a titter of laughter as he and the captain shook hands before the pair of crossed Soviet Union and EFPR flags.

'So will you do now?' the latter asked.

'Us? We will all of us be taking a much-needed holiday I think.'

'Well, I hope it goes without saying that you should let us know if you need assistance with anything. I would be happy to send some of our astronauts.'

'That is most kind of you, Captain.' Bueno turned to the room. 'Now, please join us for dinner. It's waiting downstairs.'

Twenty chairs were shoved back impatiently. As Makarov joined the throng, he noticed Sánchez waiting along his path. 'Mind if I walk with you, Mr Makarov?' she asked as he drew abreast.

'Of course. No problem.'

They made for the exit. 'I heard that you're Martian,' she said. 'I have to admit, it's nice not to be the only one here.'

'You're Martian?' he asked. It would have been impossible to tell. Her Russian was almost perfect Moscow standard.

#### 4 *The Ecuadorians*

'Yes, but I go between there and Earth a lot.' She looked at the badge pinned to the lapel of his jacket coat. 'Order of Labour Glory,' she remarked. 'Very impressive.'

'Oh this,' said Makarov, fingering the metal. 'It's only a Third Class. Everyone in my department got one.'

'That's the Ministry of Ordinance and Energy Munitions, am I correct?'

'That's right.'

'Well, I hope you get another for the work you're doing here.'

## 5 Between Worlds

One by one, the remaining tents vanished, packed away by teams of enlisted astronauts. Soon the station was quiet, the crew entering into coast phase operations.

As the days accelerated, Makarov had little choice but to construct a routine. After waking came three laps of the hab disk, sticking to the lower decks where the humidity was lower. After this came a visit to the gym, a small, neglected room far from his cabin, followed by breakfast.

He could have performed his monitoring duties at any time during daylight running, but he preferred to get it out of the way early. At 10:00, he would report to the cargo office, where he was helped into a pressure suit and directed out of the airlock into the open hold. The next sixty minutes were tedium itself as he slowly made his way along the climbway, waiting for the handheld to make its radiation calculations for each KnK charge. As expected, levels were stable: in a shocking turn of events, neither the Ecuadorians nor the Civil Admiralty were siphoning off any of the Ministry's precious antimatter from the devices.

With the results logged, he faxed them with his personal code and signature back to Mars.

The rest of the day was his own. Initially, Makarov satisfied himself playing Sea Wolf 7 on his reader, his usual pursuit when he had nothing else to do. But as the light lag to Mars grew, competitive matches became impossible, and he received little joy from beating the station's central computer. In the second week, he was forced to switch to television. Only for a short time did he try to absorb the thin dramas and reality shows that the internal network re-transmitted from Earth, before that too became intolerable. His offers to help with the engineering work taking place on the mass distribution control system were politely declined.

In desperation, he eventually took to undertaking a second set of four laps of the disk in the afternoon, this time on the top deck. That would get him to fifteen o'clock, whence he would force himself to read from the assorted technical library kept aboard electronically, apparently so that the apprentices could revise for their qualification exams.

Dinner finally arrived at eighteen o'clock, UTC -5. Of course, Makarov joined the officers' sitting, which came an hour before that of the enlisted astronauts. They were by and large a friendly cohort, missing no chances to rib him on what they said was his distinctly Martian lack of sense of humour. He learned that most of them hopped back and forth on different cyclers stations and that many had served together before. Apparently, the freeze-dried food on *The Martyrs* was distinctly better than what their government supplied on the other cyclers. Here, the Ecuadorians grew it locally over the course of the orbit: dehydrating and storing it for when the next batch of passengers arrived.

After eating, the officers usually headed back to the wardroom to play cards and drink. Makarov, who was skilled at neither, rarely stayed for long. Usually, he was in bed by nightfall in the disk.

Vogel, he soon discovered, had also been extended an invite to dine with the officers. She never came, though, instead apparently arriving just before the astronauts' sitting and taking her food away. According to the chef, her plate and cutlery were invariably found pristine and put away the next morning.

'Too good to eat with common folk like us,' the logistics muttered.

Makarov offered no response. A large part of him was glad, relieved at not having to deal with the complications that her presence would have entailed. But the rest of him—he kept thinking of that shuttle trip in, to what he had said.

Fortunately, he soon had more pressing matters to occupy his mind.

Five weeks and one day into the trip, he suddenly began receiving a flurry of paperwork through the fax machine. It seemed that that morning, an MSSR nuclear cargo rocket crashed in high winds in the North Hellas Oblast.

Such a crash was not in itself particularly surprising. As the Martian climate slowly warmed, the weather was becoming gradually fiercer, and more unpredictable, and incidents of this kind were growing ever more common. Vehicles designed for the thin, anaemic air of three decades ago now struggled with even the lightest of breezes. Everyone knew that the longer the various misinformed terraforming projects went on, the worse it would get.

Rather, what had not been predicted was the size of the resulting explosion, which smeared the rocket, its plutonium fuel rods, and a good part of the mining facility at which it had been landing across ten kilometres of desert. The prime

suspect was the ZL-6 blasting charge in its hold, which the Ministry of Ordinance was supposed to have rated to all realistic shock environments.

For the first time, Makarov was relieved to not be at home. He could hardly imagine the frenzy in the office as the safety department flew into action, denying any part in the tragedy, swamping the investigation in a tsunami of protective paperwork blaming the Ministry of Freight Transport, of Metal Extraction, of Weather Prediction, or anyone else they could think of.

Yet, the effect was that it was all hands to the pumps: and being stuck on a cyclor station 1.3 AU from the Sun provided no safety. Thus, for five long days, he ran ceaselessly back and forth between his cabin and the signals office, reviewing, amending, signing, doing his part to fight the fire raging back in Gagaringrad.

Only as late afternoon arrived on the sixth day, did he finally finish his assignments. With a sense of grandeur, he stood from his desk, slid the last pages of the complaint review into their file, and set off for the comms room.

The Sig-O grumbled as he entered. 'More?'

'This is the last lot,' Makarov declared.

'I should bloody hope so.' She stood from her desk. Makarov set the stack down in the basket marked outgoing, then walked to the antenna unit, keying in the alignment code for Gagaringrad. He didn't even have to look at the numbers any more. Half a kilometre away, beyond the thick radiation shell of the disk, the concave disk of the secondary antenna swung about to face Mars.

'Yep,' he confirmed, looking at his empty inbox. 'That's it. Done.'

'Thank Lenin for that,' muttered the Sig-O, stooping at the fax machine with the first document. 'You guys need to sort out your act. We're not equipped for this kind of through-put.'

Makarov apologised for what must have been the hundredth time, and cleared the unit. He promised he would buy her a shot when they reached Earth.

'I don't want to wait that long. Maybe you can do something for me now.'

'What?'

'Your Vogel,' said the Sig-O, jerking her head toward the line of notches against the far wall. 'She's not bothered to empty her mailbox since we arrived.'

'That's a problem?'

'Uh huh; regulation requires they be emptied weekly. Could you ask her to come do it. Or better yet, deliver them yourself.' She indicated the stack of files

before her. 'If it ain't too much trouble.'

Makarov looked at the pile. 'Seems a reasonable trade,' he said.

Vogel's cabin was in the next block along from his. He had passed it countless times entering and leaving. Yet, as he neared, he could not shake the distinct and inexplicable feeling that he was a trespasser there. Stopping outside, he instinctively straightened his jacket and tie, passing a hand through his hair. Then he knocked.

There came a soft scrambling from inside, then a click, and the door slid open. Revealed was Vogel, framed against the dim light of the cabin, dressed in blue pyjamas, a white jacket over the top.

'Hello Sergey,' she said, her surprise evident.

'Forgive me, Comrade Vogel,' said Makarov, seeing the dark rings encircling her eyes. 'I hope I didn't wake you.'

'Oh no,' Vogel assured him. 'I was already up.' She put out a hand, leaning against the doorway, her gaze questioning. It took a moment for Makarov to recall his purpose.

He held out the papers.

'These were in your mailbox,' he said. 'I'm told we're supposed to empty them weekly. Some regulation, apparently.'

'Ah,' Vogel smiled, taking them. 'I should have known I'd forget to do that. Thank you. I'll make sure I do it next time.'

'I'm sure they'd appreciate it.' He lingered a moment.

'How, uh, are things going?' he asked.

'Oh, I'm alright,' responded Vogel unconvincingly. 'Just a bit home-sick, I suppose. What about you? How are you fairing?'

Makarov was taken aback. 'Yeah. Doing fine. Busy lately, but you know, that's...'

Vogel nodded. 'Busy is good,' she said.

They hovered a further moment as Makarov prepared to excuse himself. 'Well, I suppose I had better get on,' he said.

'Right.'

He stepped back. 'Just so you know, Miss. Vogel,' he said, only briefly meeting her eye. 'The crew round here are all very friendly. If you did want to come to

dinner some time, or to play cards, I know you'd be welcome. Space can be a terribly lonely place, if you let it.'

Vogel nodded. 'That's very kind of you to say,' she replied. But something about the words told Makarov the invitation would remain unaccepted.

'Alright. Well.' He flashed a thin smile. 'I suppose I'll see you around.'

'Sergey,' she interrupted delicately. 'You don't... I don't suppose you play chess, do you?'

Makarov was taken aback. 'Sure, sometimes,' he said.

'Would you want a game? It's just that, with the delay, it's impossible to get a match out here.'

'Uh.' He checked the corridor. 'Sure.'

Stepping inside, he was met by the scent of perfume and soap. Vogel made a haphazard effort to tidy up, clearing away the layer of scribbled notes covering her desk as Makarov seated himself in the chair. He glanced at the door, wondering how long it would be appropriate to stay in this hallowed place.

The room had the same layout as his. But in terms of content, it could not have been more different. Clothes were strewn over almost every surface, intermingled with items spilling out of a still half-unpacked suitcase. The bed was an unmade, crumpled mess. A scattering of photographs covered the otherwise bare walls, non-regulation pins sticking into the plaster. Makarov's eyes were drawn next to him, to a thick, half-filled sketch pad. On its open page was a meticulous, yet impressionistic picture of what he guessed must be the Andromeda galaxy: a swirling motion of greens, blues, and yellows.

Vogel saw him examining the piece. 'I used to sketch a lot when I was studying,' she explained. 'I'm trying to get back into it.' Her voice had already gained an energy which it had not had before.

'You should,' Makarov replied. 'This one's pretty good. Though I doubt I'm a reliable critic.'

He put out a hand, tentatively turning back a page, revealing a different, yet equally striking image. 'Are these all done by observation?' he asked.

'Sort of,' replied Vogel, depositing an arm-full of clothes in a corner. 'I go and look with my telescope for a while. Then I come back here and do the drawing; that way there's time for the memory to get a bit distorted, other stuff to bleed in, if you know what I mean.'

'Sure. That makes sense.'

Seemingly satisfied with the new state of the room, Vogel seated herself across from Makarov, the corner of the desk between them. There she perched her reader. 'Which colour do you want to be?' she asked.

'I don't mind. You choose.'

Makarov won. He had thought about throwing it, given the circumstances. But something inside him told him she would know.

In fact, she did not mind losing. Indeed, it seemed to have invigorated her. 'I knew I shouldn't have moved that bishop,' she said, staring intently at the depopulated board. 'I mean, that would've meant you'd have to keep the knight where he was, so I could get the queen out, and then this whole... collapse, over this side, would never have happened.'

Makarov followed her gesticulations. 'It was definitely a close thing,' he agreed. 'I thought you had it for a while there.'

'You had better believe I had it,' she smiled. 'Still, well played. Do you play a lot?'

'From time to time,' he replied. 'It's the only game I can enjoy playing against the computer. You?'

'Against the computer; why did I never think of that? No, I used to. That was mostly with my dad.'

'Ah.'

'Hardly ever beat him, though. He'd always have it all mapped out in his head, all the possibilities. I'm sure you can imagine: infuriating. Right up until the end.'

Makarov nodded. As he listened, he found his gaze drawn to one of the photographs taped to the wall behind Vogel. In it were two figures, both dressed in brightly coloured climbing gear, standing knee-deep in snow. Behind them was a backdrop of distant rocky mountain peaks, bright blue sky above. So she had been to Earth before.

'I remember while I was doing my PhD,' Vogel continued. 'We would play in the lab as a way for us to both procrastinate. That was a task: going from thinking about star formation, thousands of light-years away, to that, then back again. Not the easiest way to play.'

'Do you miss it?' asked Makarov.

'Playing?'

'Astrophysics.' As they had played, Vogel had described how she had started

her research in foundations of general relativity, before moving to weapons research.

Vogel looked at him. 'Of course. All I ever remember wanting was to do was learn about stars, how they live, how they die, to explore. But you know, that was a while ago, and the Union only has room for so many stargazers. It was inevitable I'd have to come back to this solar system eventually.'

'I suppose,' Makarov replied quietly.

They were silent a moment longer, as Makarov checked his watch. 'I'm not keeping you, am I?' Vogel asked, concerned.

'Oh, no,' he replied. 'Not really.' Dinner had already passed.

'Well,' Vogel looked furtively between him and the board, 'assuming that's really true, how do you feel about a rematch?'

Makarov's eyes once again tugged towards the door. He knew that he had absolutely no rational reason to want to stay, to place himself in further danger.

'Sure, go on then,' he felt himself say. 'Loser sets up.'

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*'And so it is with one of the oldest lessons of economics: from each according to his ability, to each according to his needs. But, as we have seen, this principle does not just apply to individuals and families; it applies also at the national scale. For example, the Oceanic nations may exert jurisdiction over more of the Moon, but Soviet nations have greater exploitative control of the near-Earth asteroids. And it is only by sharing what we each do better, that all of humanity stands to gain the greatest comparative advantage.'*

The narrator paused, the screen giving way to a brief montage of production lines and shipping containers. Makarov examined the faces around him, lit white by the projector. For the most part, they shared the same bored expression as he had. Party Congresses had never been particularly exhilarating, but this time seemed to be attempting to set a new record for sterility.

*'Of course,'* continued the narrator, *'reductions in international trade barriers are only a single component of the Prosperity, Together programme. This last month, General Secretary Khrushcheva and President Santoso were also able to announce progress on several key global security questions.'*

A yawn accosted Makarov, which he managed to force back down. A foot kicked the side of his. Beside him, Vogel was hiding a smile. She also looked tired, dark creases underlining her eyes.

'This is so dull,' Makarov mouthed.

'I'm pretending I'm watching Star Trek,' she replied silently.

The two of them had been up late the previous night, watching an old American science fiction drama. Vogel had bought the disks in Gagarinograd on a whim, having heard that they had only just become available in the USSR. Makarov, who had initially been quite sceptical, had actually got rather swept along.

Of course, he had forgotten that the annual National Union Party Congress was scheduled for the following morning. Only when his reader had beeped with the universal summons, transmitted to all party members in the system, had he awoken and rushed to the station's tobacco-choked lecture hall. The penalty for lateness may no longer have been prison, but old habits died hard.

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As Makarov shifted in his narrow seat, trying to regain circulation, the pre-recorded interlude finally faded away. Across the screen now stretched a wide shot of an indoor stage, a podium dazzlingly illuminated at its centre.

'Ladies and Gentlemen, Comrades,' said a new, deeper voice. 'Please join me in welcoming to the stage General Secretary of the Communist Party of the Soviet Union, Teresa Mikhailovna Khrushcheva.'

The sea of darkened heads and shoulders erupted in applause as a small woman strode onto the stage, taking her place behind the podium. She smiled, raising her hands for quiet. 'Thank you, Comrades,' she said, before beginning.

'Four years ago, when I assumed the role of General Secretary of this great party, it was in a moment of profound crisis for our nation and its identity. On this day four years ago, the criminal so-called Grand Architect Malofeyev and his accomplices across Earth and beyond attempted to impose their twisted vision of Communism on the Soviet people, and on the world.

As a people, we saw that day the consequences of unaccountable one-man rule; of commitment to closed-minded, unfalsifiable ideologies, rather than the steadfast metrics of growth and economic well-being for the people. More than anything, we saw the fate that awaited us if we did not make peace with our fellow citizens of Earth and change the way we interact with the world. Today, I can say that we are making those changes.'

Eventually, the video faded to black, the renewed sound of applause topping out the ancient speakers. White words appeared across the centre of the screen:

*Local Commissioners, please take this opportunity to facilitate discussion within your sections.*

The captain, who had been frozen at the front in a glazed repose, returned abruptly to life. He got slowly to his feet, facing the tiered rows of onlookers. For the occasion, he had combed a thin white sheet of hair flat over the top of his head. With that and his red-rimmed glasses, he would not have looked out of place presenting a lecture on The Great Chinese War.

'Right,' he said, holding a pen and paper. 'Anybody want to start us off?' Before anyone could move, the first officer, Lieutenant Frunze, cleared his throat pointedly. 'Oh, right,' said the captain. 'Sorry.'

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Frunze stood from the front row, back straight. He projected his voice towards the auto-transcriber, seated centrally on its own pedestal. *'As section secretary, I formally declare the room open to statements from the lay.'*

The captain nodded in apparent appreciation as Frunze sat. The first officer was a young, sharp-faced man. Rumour had it that he had until recently been a submariner, serving aboard the attack boats of the Pacific. To have been transferred from a post of that honour to the Civil Admiralty could only mean that he had screwed something up massively. That would certainly explain the ambitious zeal with which he assaulted his quite limited duties.

Around the room, several hands slowly went up. It was good to have participation in meetings noted, especially for those seeking promotion.

*'Comrade Ivanova?'*

The Sig-O lowered her plump arm, standing from the pews. *'I think it's excellent that closer cooperation is being pursued,'* she said, making sure her voice reached the auto-transcriber. *'Anything which makes war less likely is good in my book. It's encouraging to see efforts aimed at bringing us together and fostering better relationships. I've always believed that open communication and collaboration are the keys to resolving conflicts and building a more peaceful world. I fully support any steps that help us work together more effectively and understand each other better.'*

*'Thank you, Ivanova,'* said the captain brightly. *'Very good.'*

Slowly the remaining hands were worked through until none of the officers remained. Then the room fell into silence.

*'Does the astronaut division now wish to contribute anything?'* the captain asked, directing the question to the small number of enlisted at the back of the hall. Silence.

*'Alright then,'* he said, drawing a line under his list. *'Excellent. We've got ten minutes until the next section. I suggest a toilet and tea break.'*

↻

The congress ended in the early afternoon, the Sig-O leading the singing of the national anthem from the front. Then Frunze switched off the auto-transcriber and people were allowed to file off to lunch.

*'Hang on a minute,'* called the captain. *'Bridge officers, can you remain behind. And you, Makarov. What I have to say may be of some issue to your assignment.'*

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'Yes, Comrade Captain,' replied Makarov. He made his way around the front row as Vogel followed the others out. She gave him a barely perceptible wave back. His only response was to turn red.

'Up late, Sergey?' asked the Sig-O casually, eyeing the creases under his eyes.

The captain waited until the last enlisted had left, then positioned himself before them. 'Just a relatively small matter,' he began. 'But it might require a bit of extra planning from us.'

The front row waited expectantly.

'We're going to be picking up some extra souls on our approach to Earth. Four more: three hibernating, and one walking.'

'Who exactly are these passengers?' asked a deep voice. This was Pavlov, the chief of engineering. He was a large man, with an enormous greying beard to match. Ordinarily he allowed it to bush out from his chin in two Tirpitzian triangles, but for this occasion, he had apparently seen fit to plat it. Before him on the table, flashing in the light, rested his prosthetic right arm, ending in a polished metal claw.

'It's a work party,' replied the captain lightly. 'A small group is being transferred to the Moon from Kuznetsky CS.'

'Kuznetsky,' said the logistics officer. 'That's one of the Near-Earth Object mining facilities, right?'

'Correct.'

'Convicts then,' muttered the chief engineer.

'Yes, they're convicts. The three going into the pods, anyway. Plus one marshal commissar, who'll be in charge of the transfer.'

'Great,' breathed the Sig-O. 'We get to finish this thing with gulag guard aboard. Just what I was dreaming of.'

'That's an officer of the court you're talking about,' interjected Frunze acidly. She ignored him.

The captain raised a weary hand. 'They'll be coming aboard six days before we get to Earth via short-range. The workers will be sedated. Impact on operations should be minimal. We just need to make sure we're ready for it to all go smoothly.'

Pavlov leant back in his chair, which emitted a pained creak. 'Any idea why we're being given this great privilege?' he asked. 'Surely these construction sites have their own shuttle services. Yet they're bothering to shack them up here for a

six-day journey?’

The captain shrugged. ‘You now know everything I do, Vasily. This is the KGB we’re talking about, after all.’ He paused. ‘Only thing I can guess is that they want this transfer kept as low-profile as possible. If they use the military shuttle service, they’d have to intercourse with the Maritime Executive, who can get away with asking awkward questions. We, on the other hand, cannot. You can all make of that what you will.’

A short time later, they were dismissed. The captain and Pavlov remained sat as the rest stood, collecting their things.

‘Looks like Comrade Vogel forgot something,’ said the Sig-O. Makarov looked and saw the blue cardigan draped over the back of her chair.

‘Uh,’ he said, feeling multiple gazes turn on him. ‘I can take that.’

As the others left, Makarov retrieved it, then followed them out. As he crossed the room, he caught sight of Pavlov’s eyes following him closely. The chief engineer muttered something inaudible to the captain, who went silent. Makarov pretended not to see as he reached the doors.



Makarov shook his head. ‘You must be joking.’

‘What?’

‘Q.I’ is not a word.’

‘No,’ replied Vogel. ‘It’s pronounced *Qi*. Like Chi.’

‘Hmm,’ said Makarov, putting down his reader. ‘What does it mean, then?’

Vogel sat up on the bed, gesticulating. ‘It means... well, you know... *Qi*. Like soul. Or vibe.’

‘Vibe?’

‘Oh come on Sergey, you know what a vibe is.’

‘Well yeah, I know what it is. I just don’t think that “*Qi*” means it.’

‘I promise you it’s a real word.’

‘Fine,’ replied Makarov airily. ‘I believe you... Just so long as next turn I can have—’ he looked down at his lap. ‘—A A D R’ over that triple word score.’

‘Oh, don’t be an ass.’

‘Otherwise,’ he persisted. ‘I’m going to need to see it in the dictionary.’

"The dictionary," Vogel mocked. To the surprise of neither of them, it had turned out that The Martyrs of Córdoba did not have any dictionaries aboard. Yet, it was possible to search across all the thousands of volumes within the electronic technical library to see if a particular word appeared. This was as good as the same, Makarov claimed. Begrudgingly, Vogel plugged her reader into the network. A few moments later the result came: no matches.

'Well that doesn't prove anything,' she said, swiping away the panel. 'I mean, it's a bloody technical library. What did you expect?'

'Seems conclusive to me,' Makarov said, suppressing a smirk.

Vogel spent several seconds thinking, then suddenly she sprung up, clicking her tongue the way she always seemed to when she had an idea. Makarov watched her lean across her desk and pull a book from the bottom of the stack she had made. *Against Alternative Medicine*, he briefly saw across the cover. She opened it in her lap and began flicking resolutely through the pages.

'I know it's in here somewhere,' she murmured to herself. Makarov looked at the thickness of the book, and the rate of page turning, and decided perhaps it was not worth the fight.

'Alright,' he said in a conciliatory tone. 'Maybe we can just let this one—'

'There.'

Vogel turned the book and presented it to him, a finely-chewed fingernail indicating the place to look. And there it was: Qi, under Acupuncture in the Guang-dong SSR. Makarov looked from it to Vogel's triumphant smile.

'I never doubted you for a second,' he said.

The exultant operatic singing of a new episode of Star Trek rang out from Vogel's reader. Makarov settled back in his chair.

'I tell you what,' he mused. 'Malofeyev may have been an evil maniac who tried to destroy civilisation, but he did at least know how to keep a party congress interesting.'

'I know, right,' Vogel replied. 'All the music, the colours, the semi-naked ladies dancing.'

'The race hate, the constant threats of nuclear war.'

'It's like they're not even trying any more.'

They both smirked.

Makarov could not recall exactly when it had become psychologically possible

for people to joke about the man who had been supreme leader for thirty years, and who had bent every aspect of the Soviet Union to his will. Even humour, that instinctual survival mechanism of his countrymen, had struggled to absorb that final incomprehensible act of cruelty he had tried to foist on humanity.

That act was known as the Mothersky Doctrine. Its objective: wipe away all remnants of terrestrial civilisation, Soviet and capitalist. Malofeyev's people had disappointed him for the last time. Their output could not match that of Oceania; they were falling ever further behind in military might. Unless action was taken, the imperialists would achieve eternal victory.

Upon ruins of this great failed experiment would be built a new world, peopled by the only beings worthy to call themselves socialists: the men and women of the exploration and cosmonautics wing. When the ground cooled, they would return home from their bases spread across the solar system. From there, they would continue their great task of colonising the universe in the vision of Lenin.

'Well, I'll still take the boring,' said Vogel. 'Else, I'd never have had the pleasure of trying—' she turned around the can in her hand '—Perm's Non-Alcoholic Fruit Drink. And what a tragedy that would have been.'

Makarov raised his own can, which he had likewise pilfered from the stores. 'I'll drink to that,' he said, and they clinked. The opening scenes of the show materialised before them.

'You know,' Makarov felt himself compelled to say. 'I was actually dreading this trip before. But now, it's seeming like it might not be so bad.'

'I know what you mean,' replied Vogel. She paused for a moment. 'I imagine you were expecting me to be a real pillock, given what most Tag-Alongs are like.'

Makarov shifted in his seat. 'Well,' he started. 'I don't quite know about that.'

'It's alright,' she assured him. 'You don't have to admit it. I just hope that in the end I differed from your expectations, at least a little bit.'

Makarov looked at her, then across at her desk, to where several of her latest space-scapes were laying. Beside that were the hidden-away stacks of paper sheets, each filled to its edges with what must have been astrophysical calculations, sat underneath another of her books: *Holes in the Heavens: A History of Modern Astronomy*.

'Yeah,' he murmured, turning back to her. 'I think it's fair to say you're different. In fact, I think you're probably different from any person I've ever met.'

Vogel looked back at him, her deep green eyes peering into his. 'Well, I'm glad

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you think so,' she said tentatively. 'Because I think the same about you.'

'You do?'

She nodded.

Suddenly, Makarov could feel his heart thumping within him. What if Brantov found out, or the crew? What would the consequences be then? Gently, Vogel placed her reader down upon the desk. 'You know,' she said quietly, looking at him, 'maybe we should save this episode for another time.'

Makarov nodded. 'Maybe we should.'

## 7 The Loyal Eleven

For a long time, killing Malofeyev had been thought a sheer impossibility. Once an outgoing man, the aged Grand Architect now rarely left his bunker, buried deep beneath the Kremlin. His frequent addresses to the people of the Union were now done entirely remotely, his personage projected onto whatever podium fitted the occasion. Indeed, by the start of 2093, nobody outside his closest staff had seen him in person for over three years. Rumours circulated that he was actually dead, and that the projections were merely computer representations of the man himself.

Perhaps upon hearing these rumours, and against the vehement recommendation of his security advisors, Malofeyev decided he would once again show himself directly to the nation. Furthermore, he would do so at the event most dear to him: centennial graduation ceremony of the Academy of Cosmonautics, taking place in Earth-orbit. Henceforth, nobody could doubt his continued role as supreme leader of the nation.

News of his attendance was not revealed outside his staff until several days before the ceremony. Malofeyev's security advisors urged that it be even later, but were told that the Ministry of Public Education needed time to organise the army of television crews which would need to be in attendance. It is unclear if things would have happened differently, had this advice been followed.

He was flown up on the morning of the ceremony in his executive spaceplane, with full military escort, arriving at Gora Station at around 09:15. Shortly thereafter he was moved to the Academy. It was around this time that word was first given to the public at large that their beloved Grand Architect was to appear in person, and that they were to have the honour of watching the event live. If the ratings were to be believed, by the time Malofeyev climbed up onto that stage, aided by an unseen bionic skeleton, there were over eight billion pairs of eyes watching him.

Before him stood to attention a hundred young men and women, their pale uniforms pressed and starched, their tall boots polished to a mirror finish. These were the soon-to-be cosmonauts: each the output of five years of gruelling, unre-

lenting training, which had pushed their minds and bodies to the limits of human capability. Now, after all that work, each of them had been deemed ready to join the elite division which was the Soviet Cosmonaut Wing.

Malofeyev congratulated them.

'As I look down at all of you,' he declared, 'I am reminded of myself when I was a young man. I am reminded of all which makes the Soviet Union the supreme civilisation in the universe: our strength, our resilience, our genetic purity. Each and every one of you embodies to your core all of these virtues. That is why you have been chosen. Chosen to be the ones to go forth and explore, to spread the seeds of Leninism out into space. It is to you that we entrust the future survival and prosperity of the human race. I stand here today in order to tell you all, flesh to flesh, that I am proud of every one of you.'

Of course, nobody knew then the true meaning intended of those words. He finished to rapturous applause, a sound presumably echoed around the Union, under the eyes of a million political commissars. Subsequently, he withdrew from the stage, returning to his private quarters to rest for the return trip. The ceremony proceeded on in his absence the same way it had for the last ninety-nine years, with each cadet being called to the stage to receive their badge from the President of the Academy.

It was as the sixty-eighth climbed to her feet that the first of the two shaped-charges went off. It is still not known which of the now all-executed maintenance staff smuggled it aboard the station. What is known is that from its position in one of the Academy's utility rooms, it managed to punch through six decks, straight into the executive suite, where Malofeyev was located. Thirty-one people were killed instantly, and more in the immediate fire that followed. The resulting shockwave ping-ponged from one end of the station to the other for several minutes, shattering windows and water pipes.

Ten seconds later, the second charge went off. This was positioned a short way from the first, just off the Academy foyer. First it pierced a main station bulkhead, then tore through a pump station, and a computing hall, then, finally, into the Hall of Address, where the ceremony was taking place. All inside were killed. Only those who had been able to reach the emergency shelter in those few seconds after the first explosion survived: mostly academy and security staff, as well as twelve of the newly minted cosmonauts. They had been the ones who had had to stand

for the ceremony in order to make room for the TV crews.

All was disarray, blood and flame. But the eleven cosmonauts did not hesitate; their training precluded it. The Grand Architect's exoskeleton indicated that he was alive. And so they acted, locating the academy's locally held firefighting equipment, suits, and respirators. Then into that hell of smoke and heat they strode, fighting their way through the crumpled metal and collapsed decks. In twenty minutes they had found him, near death from fume inhalation, in an encroaching den of flame. Any longer, it was said, and the Grand Architect would have died that day.

Then, placing him into a rescue bag, they carried him out, where a mobile restoration vat was already waiting.



Makarov awoke with a start. Groggily, he tried to recall what he had been dreaming about. But already the images were slipping away, leaving only a dim, distant orange glow. Then that too was gone.

He lay for some time, waiting for sleep to return. Instead, his mind began busying itself with the meaningless half-thoughts which readily collected in the early hours of the morning. Eventually, he gave up and climbed carefully from the bed.

Beside him, Vogel stirred, opening her eyes. 'Everything okay?' she asked.

'Yeah, just going for a walk,' he whispered.

'Okay.' She nodded, giving him a sympathetic smile, then closed her eyes.

Makarov set about dressing himself, using the desk lamp for illumination. Vogel had seemingly forgotten to tidy after her day's work, and her notes still lay spread upon the desk. He could now not help but look briefly over them. They were curious; written in scrawling print, in lines which were not even close to parallel, and sometimes even overlapped. It was how he imagined a person might write with their eyes shut. But everyone took notes in different ways, he thought.

Pulling on his jacket, he slipped out into the dimmed night of the corridor, then set off for a walk around the ring. Inside the forest deck, it was raining, thick globs hammering the glass out of the darkness. Makarov followed along the corridor until he arrived at one of the common areas with external windows.

He stopped, gazing out. In the far distance behind them, the reddish spark of Mars rotated with the rest of the stars. They had been under weigh for three

months now. Only two months remained.

Makarov found himself thinking of Aldan Vogel. He remembered it being written that the physicist, who had been in his sixties, had died of early-onset Alzheimer's. It was a rare case, apparently; even in the MSSR, very few people acquired the disease any more. A cruel end to a man who had reminded a generation that physics was still a tool for wonder, as well as for domination over nature.

Soon sleep began again to stalk him, and he made his way back past the kitchen, offices, and wardroom. To his surprise, the last of these was occupied. Almost involuntarily he paused, seeing a large, dark figure resting at one of the tables, a bottle before him. The outline of the beard told him it was Pavlov.

'Trouble sleeping, Comrade Inspector?' the figure called out before he could move on.

'A little,' he replied hesitantly.

'Bad dreams?'

'Not sure.'

'Ah.' The chief engineer leant forward, his chair creaking under him. 'Here.' He held up the bottle. 'Some of this will help you sleep.'

'Thanks, Comrade,' replied Makarov from the doorway. 'I think I'll be alright, though.'

'Oh, come now. I insist.' Pavlov gestured to the chair across from him. 'We have some things to discuss, I think.'

Makarov suddenly felt a chill. He recalled that look that he and the captain had given him at the Congress, those weeks prior. Guardedly he seated himself in the chair. The engineer reached across for a second glass, setting it upon the table, then poured into it the transparent liquid. Makarov nodded in thanks.

'Not bad,' he winced.

'My own supply,' said Pavlov, fondling the bottle. 'Not that crap the Admiralty expects us to put up with.'

Makarov nodded, feeling the vodka begin to drain into his system. 'What's the occasion?'

'No occasion required,' replied Pavlov, returning the top to the bottle. 'But as it happens, just got myself a new granddaughter.'

'Congratulations. How many do you have?'

Pavlov counted on his fingers. 'That's the... fifth one now. And only one grandson. Can you imagine, the poor bastard.'

'Is there a name? The new one, I mean.'

'Maya. That's what I believe they're going with. But knowing my daughter-in-law she'll probably have changed her mind three times by the time morning comes.'

Makarov said it was a nice name. Pavlov agreed, unscrewing the bottle and refilling the two glasses. Then he sat back in his chair. 'So,' he said. 'How are you and that physicist getting along?'

Makarov suddenly felt the danger of the situation rise up. 'The... physicist?' he asked, trying to show no emotion.

'That's what she does, right? Our Comrade Vogel.'

'I believe so, yes.'

Pavlov settled him with an unreadable expression. 'Playing a bit of a dangerous game, don't you think? Says on the crew report that she's the niece of one of your Martian ministers.'

Makarov said nothing. He looked down at the table, thoughts turning over in his mind. This had been the one thing he had been afraid of.

'Can't say I blame you, though,' continued Pavlov. 'She's a pleasant woman, from the few interactions I've had. Were I a young man like you, I'm sure I'd make the same mistake.' He paused. 'But then, nobody ever accused me of being the sharpest tool on the belt. You, on the other hand... you sure you know what you're doing with this thing?'

'What do you mean?' asked Makarov, admitting nothing.

'I mean, Comrade, that you're walking a thin line, with some severe consequences: your career, your freedom. Hell, with you Martians, maybe even your life. That's a lot to risk just to get your leg over for a bit.'

Makarov felt himself go red. He knew he ought not to say anything, but he could not help himself. 'Well, maybe if that were all it was, you'd be right,' said tersely.

'I see.'

Makarov was tired of the silence. 'So, are you going to turn me in?' he asked directly.

He was surprised by the reaction. Pavlov sat up, his wrinkled features screwed together. 'Me? Turn you in? Why the hell would I do that?'

Makarov frowned. 'Isn't that what this is about? If you don't report it, you're culpable.'

'Eh, what are they going to do? Besides, I can't report what I don't know. But of course, I can't speak for everyone, that prick Frunze, for example. People tend to find out things on a ship like this, whether they mean to or not. So you need to be more careful Comrade, if this is really worth it to you.'

Makarov nodded. 'Well, thank you. It is worth it; of that I'm pretty sure.'

For the first time, the old engineer smiled, the action disturbing his great grey beard. 'I'm glad, Comrade. It's a hard thing indeed to find a good woman in this world, let me tell you. Hold on to that.'

Makarov nodded again, then thought for a moment. 'So, what gave it away?' he asked. 'What did we do?'

'Ah, it was nothing you did,' Pavlov replied. 'The ship's computer keeps track of changes to the mass distribution inside the gravity wheel. Needs to so the ballast tanks can shift mass to keep the wheel's centre of mass exactly over the axis. As Chief of Engineers, I'm the one who gets told when a cabin has twice the mobile mass it's supposed to.' He paused. 'But those records are easily deleted. And that's what I've been doing.'

'Well, thank you. And what about the captain?'

'What about him?'

'He knows too, right?'

Pavlov shook his head. 'No, just me.'

Makarov frowned in confusion, thinking again to after the Congress, the muttered words between the two men. Pavlov seemed to come to understand. 'Ahh. I know what you're getting at,' he said. 'Wasn't planning on bringing it up, but I suppose the cat's out of the bag now, ain't it?'

Makarov waited in silence. Pavlov laboriously refilled the two glasses, indicating for him to drink. They did, then he proceeded. 'What I was saying to the captain that day is that I know who you are, Sergey Makarov.'

Makarov sighed inwardly, resigned to his fate. 'Who am I?'

'You were one of them that saved the Grand Architect on Gora weren't you? One of the—what did they call you—The Loyal Eleven.'

Makarov thought about denying it, but he did not have the energy. 'You must have a very good memory.'

'So they say. But that wouldn't have been enough by itself. See, I had a maths

teacher whose surname was Makarov. That's why I remembered your face when you came up on the TV that first time. You and the other baby cosmonauts.'

Makarov said nothing.

'So then, I did a record search. What did I find? Nothing. No Sergey Makarov. No record of you having anything to do with that day.'

'Maybe you imagined it,' said Makarov dourly. Pavlov stared at him, unamused. Eventually, he relented. 'There's no record because they wiped me.'

'Why would they do that?'

'Because I resigned. The day after the attack, I left the Academy of Cosmonautics.' He could feel the vodka burning in his veins now.

'Because of the trauma?'

'Because of what we were becoming. It was obvious, as soon as we were sat in front of those cameras. We were going to be the mascots of that day. We were told to demand revenge against the Americans: every other word out of our mouths had to be "justice", or "vengeance", or "retaliation". Overnight we became the foremost piece of pro-war propaganda in the whole Union, with one purpose: to make sure nobody had any doubt that it was the CIA who planted those bombs, and they were responsible for what came next.'

'You don't think they were ones who supplied the explosives to the Uzbeks?'

Makarov shrugged. 'They probably did, I suppose. I don't think separatists could have pulled something like that off on their own.' He took a breath. 'But the monsters who ordered those bombs be planted, who caused the death of pretty much everyone I knew and loved, those wouldn't be the people who Malofeyev torched in their cities, or shredded inside their space stations. I knew that couldn't be a part of the machine that made that happen.'

He paused, turning the shot glass between his fingers on the table. 'There were two or three of us who seemed to really believe those lines we were given; that the loss we all felt could be cured by more violence. Or perhaps they were captured by the fame and the luxury of it all. But for the rest of us, all had the same thoughts. The others just decided that it was best to go with it, after all we had sacrificed. They trusted that all these words wouldn't turn into action.'

'But I couldn't manage it. I couldn't go on playing a part in that insanity, knowing that if the world did really burn, I'd have played a part in it. I was lucky, I suppose: all they did was send me back to Mars, stripped of all honours and qualifications and under orders never to talk about that day. As for the others,

turned out that they were right. Malofeyev didn't declare war; not yet anyway. Eventually, they got to go back to their missions, to exploring their given parts of the solar system. I threw it all away for nothing.'

For a moment there was quiet, with only the turning sound of Makarov's glass against the plastic table.

'I don't get it,' persisted Pavlov.

'What?' retorted Makarov, losing patience.

The engineer raised his hands, as if it were obvious. 'Well, that's all over now. Malofeyev is dead. Nobody is going to come after you now. You can go back to being who you were before.'

'That's not how it works.'

'Well, why the hell not?'

'Because it's too late,' Makarov snapped. 'I'm not that person anymore. That man who would train for fifteen hours every day, year after year, just to get the chance to walk upon Ganymede, or dive under the ice of Titan, or fly out to the Kuiper Belt; that man who would run into a burning sector, just because it was his duty. He's dead. He's gone with the rest of them in that room. All that's left of him now is this.' He clutched weakly at his jacket. 'A shadow, a weak imitation. All I feel is shame, and fear, and disinterest. Yes, I might wear the same face as he did, but I'm no more Sergey Makarov than that actor who played me in the recreation. And if I tried to be him now, I'd be no better him: a pretender. A fraud.'

Pavlov was silent, his small eyes glassy against the dark. 'Maybe you're right,' he eventually said. 'I hope not, though. Or that Comrade Vogel sees something else. Otherwise, I'll have been wasting my time deleting that shit from the computer.'

## 8 Close Approach

The Earth was now a visible semi-circle, though still small enough to fit behind the tip of a pencil at arm's length. It hung against the black, somehow imposing even at this extreme distance. Along behind it was dragged the tiny white speck of Luna, still little more than a point to the human eye. The space between the two bodies flashed irregularly with yellow sunlight: solar panel reflections from the countless orbital factories, power-beamers, and other facilities shrouding the planet and its moon. These were the engines that drove the industrial heartbeat of humanity.

'See anything?' Makarov asked.

'Not yet,' Vogel replied, briefly checking her watch. 'Still have a few minutes, though.' She returned the ultra-enhancing digital telescope to her face, steadying the rim against the glass as she panned slowly across the back void to the aft of the station.

Makarov put a palm on the metal handhold before him. Though the walls of the dock section were almost motionless against the sky, small micro-vibrations made his reflection gyrate back and forth before him. It would be impressive if she could get anything under these conditions.

'There. Look!' she said after a few moments.

Makarov followed the line of her scope, searching the featureless dark. Then he saw it: a dim spark, passing to their right, gradually growing in brightness. There was a click as Vogel depressed the capture button.

For several seconds it transited, before once again starting to fade into the darkness. Vogel barely had time to take a second picture before it was gone.

'Here.' Vogel passed him the scope triumphantly. On the miniature viewing screen was displayed an image of Kuznetsky CS. Though slightly blurry, one could clearly make out the grey, irregular rock of the asteroid, the squat black domes of the mining facility clinging to one side. It was even possible to detect a slight haze around the object, probably released dust from the mining operations.

'2011 GH,' Vogel declared. 'This one is really going to show up the rest of the

collection.'

'I can't believe you managed to get rid of the blur,' mused Makarov. 'And from this far.'

'Don't credit me,' replied Vogel. 'It's all the internal computer that does it.'

Makarov smiled, certain this was untrue. But he did not press the point. He handed back the scope.

A brief alert siren sounded.

'All hands,' declared the tannoy system. 'Be prepared for scheduled burn in ninety seconds. Bind all items in long fall zero-G spaces, otherwise attain hand-holds.'

They had been told to expect such an imposition. The gravitational pull of the passing asteroid, though microscopic, would have been sufficient to disturb the eye-of-the-needle accuracy in their orbital path. Such precision was required for the gravity assist they were to receive from Earth. This was a finely calculated interaction, necessary to swing the station's trajectory back onto an intercept with Mars, twenty months from now, and Earth, five months later. Far away, on the sunward and leeward tips of the station, the electro-thermal manoeuvring rockets would be warming up to fire.

As the seconds counted down, Makarov glanced furtively across at Vogel. Then he straightened himself before the window, hands far apart, clasping the handrail. For a moment she looked questioningly at him.

'Lieutenant Uhura,' he barked, doing his best impression of an archaic American accent, 'charge phaser banks and prepare for warp factor seven.'

Immediately she seemed to understand, her face turning to alarm. 'Factor seven, Captain?' she asked breathlessly. 'Are you sure that the ship will be able to take that?'

'She'll have to,' replied Makarov sternly. 'If we make this manoeuvre in time, it could mean doom for the entire Federation.'

'Of course, Captain! You're completely right. Preparing countdown now.' A few moments later, the bored voice of the bridge officer began counting down from ten.

'If we don't make it through this, I want you to know that it's been an honour,' said Makarov, staring solemnly into the void. 'and that I would very much like to have banged you one more time.'

'Oh Captain, the honour has been all mine.' The countdown reached zero.

'Engaging warp now.'

A very slight acceleration gripped the space around them, lasting for several seconds. Then the burn ceased, silence reigning.

'Captain,' said Vogel. 'It's Commander Scott, he says that he's split his whiskey on the fusion control again.'

At this point, they burst into laughter. Soon they had recovered, settling again before the window, staring out into the darkness together. Her hand found his.

They remained like that for some time, allowing the endless void before them to suck them in. Makarov thought that he felt perfectly content, right there in that spot.

As he looked across at Vogel, however, he noticed that a troubled, vacant look had begun to occupy her pale features. As he watched, a tear crawled out of one eye, collecting at the corner. She wiped it away.

'Are you okay, Nina?' he asked gently.

The sound seemed to send a shock through her. 'Yes. I'm fine,' she said. They hovered for a moment.

Then, to his surprise, she pulled herself against him, kissing him deeply. Makarov was taken aback by the motion, so suddenly had it come, and he had to put out a hand to stop himself from losing attitude in the zero-G. He realised that he was kissing back as fervently as she was. Then he felt her hands begin to travel downwards.

'Shall we go back to the cabin?' he asked, attempting to free his mouth from hers. She shook her head, her hands continuing with their mission, finding his belt. His one hand was now their only purchase, her legs wrapping around him like a spider holding its prey.

Makarov was not entirely sure what was happening but he knew that, whatever it was, it was a profoundly terrible idea. Yet, he did not want it to stop. With a pop, she freed his belt and it came sliding out.

Suddenly, new voices added themselves to the quiet that had until now choked the corridor, distant but approaching. Instantly, the two disengaged. In a moment of frenzy, Makarov reinserted his belt. As the voices grew louder, to his dismay, he recognised Frunze.

He ran a casual hand through his hair as two figures appeared, making their way along the gloomy passage towards them. In front was the first officer, who

Makarov had heard, speaking animatedly. Behind was Sánchez, wearing her usual smile. 'That must have been terrifying,' he heard her say. It occurred to him that he had not seen her in several months.

A moment later they seemed to notice Makarov and Vogel. 'Comrade Inspector,' greeted Frunze guardedly, stopping before Makarov. 'You're aware the Kuznetsky shuttle is coming to the North dock?'

'Yes, Comrade Lieutenant. Was just watching the fly-past from here.'

'Ah.' Frunze turned to Vogel, greeting her politely.

Sánchez arrived, greeting Makarov. 'I don't believe that we have met,' she said to Vogel, shaking her hand. She introduced herself.

'Nina Vogel. Nice to meet you.'

Sánchez said that it was a nice name. 'May I ask, will we be seeing the both of you at the station dinner on Thursday? I hear that it's going to be a good one this year.'

Makarov indicated that he would be.

'Yes, me too, I think,' said Vogel, to his surprise.

Sánchez said she looked forward to it. 'Shuttle is fifteen minutes out,' Frunze reminded Makarov icily as they went to move on. 'The captain wants all monitors there before docking.'

'Right. I'll be there in a moment.'

Makarov had quite forgotten the time. Given the large number of tasks the crew had to undertake as they approached Earth, he had been asked to assist with bringing aboard the new arrivals from Kuznetsky. It was a grunt job, apparently.

In a few minutes, he parted with Vogel and navigated his way north to the docking port. The captain and Frunze were already waiting, along with the signals officer and eight enlisted astronauts. The captain gave him an acknowledging nod as he arrived.

Beyond the porthole, the brightly lit "O" of the transfer shuttle stuck out against the black sky, still far off.

Over the next ten minutes, it rode smoothly towards them, as if carried on rails. The craft beyond it came into view: small and boxy, bearing an extruded octagon shape typical of most Soviet military and penal craft. Eventually, it swallowed the sky, and with a dull clunk, it made contact. There was some fumbling around with the door, followed by a brief drop in pressure as the two spaces connected.

Makarov smelled the scent of released ozone.

The hatch swung open, revealing a man in the black uniform of a marshal commissar. He was an imposing figure, muscular, with piercing blue eyes, and a layer of blonde stubble coating his square jaw. At his hip was holstered a snub-nosed pistol, beside what could only be a stun-baton.

He and the captain spoke for a time in low voices, the latter nodding. Then the captain departed. 'Good luck everyone,' he said as he headed for the cargo department. The commissar smiled after him.

'Alright ladies and gentlemen,' he said the crowd when he had vanished, slapping his hands together. 'Welcome to the show. I am Comrade Commissar Overchuk. Now, here's what's gonna happen. I've got three lovely fresh pirozhkis in the oven, waiting to come out. We're gonna remove them one at a time, with at least three of you to each. Once that's done, we'll take them down to the holding cell, in your gravity ring. All very simple, right? Any questions?'

Heads shook timidly.

'Excellent.' Overchuk unfastened the strap on the baton. 'I'm gonna warn you now: they're spicy. We injected them with aggression modifiers, but that doesn't mean they can't give you a good smack if you get too loose on them. Those of you getting a Behaviour Management Device,' he waggled the baton, 'make sure you're ready to use it. You get cuddly, and I promise you you'll regret it.'

The crowd was silent. The commissar gestured for Frunze and the two astronauts nearest him to enter the shuttle. A minute later they emerged, guiding between them the first of the prisoners. He was dressed in grey overalls, featureless except for a white five-digit number stencilled across the back. A black bag covered his head, tied tight at the neck. Makarov could not help a twinge of pity from grasping him at the sight. Worse, his hands and feet had been locked to two ends of a short metal rod, which fed between his thighs, pulling him into a hunched sitting position.

The three floated him over to the far side of the corridor, while the rest of the crew watched in uncomfortable silence. Then the commissar appeared again, summoning the Sig-O and three others. They shortly emerged with an equally wretched and much larger individual. The astronauts held him, while the Sig-O followed behind, uneasily cradling the stun baton she had been given. Then finally Makarov and the remaining two crew were summoned.

They found Commissar Overchuk in the main hold, hovering close over the final

prisoner. The latter had his hands and feet bound to the wall with tape, his back facing the wall. 'Alright, your turn Fucker,' declared the commissar to the black bag, as he set about severing the tape.

Shortly the prisoner was freed, and Makarov and the others took him up in their arms, leading him back toward the airlock. Makarov could feel the gaunt, sinewy body beneath the material of the overalls, and the regular whisp of air as the prisoner's breath escaped the black bag. He wondered what this man could have done to deserve this kind of treatment.

They soon reached the others, and all together set off for the gravity ring, Overchuk in the lead. A few astronauts remained to close up the shuttle, which would shortly depart, returning to the detention centre under remote guidance.

Before long the grim procession reached the axial elevator to their destination. This would have to be taken one at a time. For ten minutes Makarov and his two accompanying astronauts waited silently, holding the limp, weightless prisoner between them, as the first two prisoners were shuttled out to the gravity ring. Then the commissar returned, calling them in.

The change in lighting must have reached through the bag, as the prisoner began to scan his head back and forth, as if taking in his new environment. Then he cocked his head, listening. 'Keep him still,' demanded the commissar. They held him by his legs as Overchuk freed the ankle bindings, allowing him to stand. A minute later, the elevator set off. Makarov had expected them to have to support the weight of the prisoner, when it came. But the man in the grey overalls seemed determined, despite his state, to stand by himself. They let him do so.

Makarov was sweating when the doors finally slid open, revealing the others. The looks of the astronauts indicated that something was going on. The larger of the two prisoners, and the second to emerge from the shuttle, was sat on the floor, slumped against the corridor wall. Frunze and several others were standing over him, their stances uncertain.

'Problem?' asked Overchuk, stepping from the elevator.

'We... uh... can't get him to stand up,' said Frunze. 'He's refusing.'

'Refusing, is he?' The commissar pulled a face of mock surprise. 'Is that right?' he called down to the prisoner. 'You're refusing? That really something you want to do?'

The prisoner did not move, remaining hunched forward, his head bowed. The commissar turned and gestured for the Sig-O. 'Reckon a little encouragement is

needed.'

'Me?' she asked, stepping forward hesitantly, still holding the baton. 'You want me to... him?'

'Well, unless you fancy carrying there him yourself,' replied the commissar. The Sig-O looked at Frunze, who said nothing. Then she swallowed, slowly advancing, baton held out with one hand. She gave the prisoner a quick, hesitant prod in the arm. There was a sharp crack, and the hunched man flinched. But he did not move.

The Sig-O immediately withdrew the baton.

'Guy that size?' said Overchuk, shaking his head. 'He's gonna need a lot more than that, darling.' He placed a hand over the Sig-O's, so that they were both holding the baton, then knelt down, bringing her with him. 'Now, like this.'

Without warning, he plunged the baton hard into the prisoner's abdomen. Second after second, the air was filled with electric snapping, and muffled moans as the prisoner writhed against his bindings. Only after a seeming eternity was the baton withdrawn, allowing the prisoner to slump forward, breathing heavily. The Sig-O was a pale shade of white.

'So, you're gonna get up now, aren't you?' sung Overchuk into the side of the bag. But the prisoner remained quite still, not responding. The commissar frowned, checking the voltage setting on the baton.

Makarov, who had not once torn his eyes from the scene, had almost forgotten about his own prisoner. Thus, it came as quite a shock when from beside him he abruptly cleared his throat. The sound pierced the quiet like a gunshot. Then he slowly stepped forward, towing them with him, until he was standing over the sitting prisoner.

The latter was still for a few more seconds. Then he seemed to relent, the resistance draining from his limbs. He started to climb to his feet, being hurriedly pulled the rest of the way by Frunze and the attending astronauts.

'Alright,' muttered Overchuk. 'Shall we proceed.' Makarov's prisoner went to step forward but found the point of Overchuk's baton blocking his path. 'Not yet. You wait.' The prisoner stopped but did not flinch, though the metal points were sharp. His featureless face remained perfectly level.

Soon the convoy was moving and they too were allowed to set off. As they made their way forward, Makarov noticed that his singular prisoner was not walking normally. It occurred to him that his leg might have been hurt during the move,

## 8 *Close Approach*

especially if he was not used to full gravity. Adjusting his grip, he tried to offer some support to what seemed to be the injured side. But the prisoner shifted away, cancelling his efforts. Instead he walked resolutely on, his stiff gait carrying half of his body up and down with each step.

He continued until they reached the assigned hibernation bay. One by one, the prisoners were ordered brought to the cell, whereupon the commissar shunted them in. First the small prisoner, then the large one. Then, finally, Makarov's.

It was only as he walked away that Makarov saw fully the nature of his limp. With each step, the right leg swung stiffly in and under his body, then landed. There was nothing particularly remarkable about it, to be sure. But for some reason Makarov found the motion oddly familiar. Before he could reflect further, though, the man was forced into the sitting position. The door was locked.

'How long 'till you can have them under?' the commissar asked the doctor, attaching the keys to his belt.

'Less than an hour, Comrade Commissar.'

'Good. Sooner these bastards are out of action, the easier my job is.' He slid his stun baton into its holder, and turned to the crowd. 'Good work everyone. Now, where's a man get lunch around here? I'm fucking starving.'

## 9 Enemies of the State

[Vogel has a note, indicating the presence of the infiltrator.]

Makarov spent the rest of the afternoon supervising the move of the ordinance package into a different cargo container in the hold. Then, to add insult to what had already been an uncharacteristically busy day, he received a surprise request from Vladivostok Mission Control to re-inventory all plutonium-containing components within the package for finalisation of their Earth entry forms.

It was gone 2200 when he finally left the dock. After calling the elevator to the ring section, he collapsed into the low gravity of the hub, exhausted.

As he waited for its arrival, he found himself gazing out of the nearby window. Beyond, the field of stars slowly rotated. They looked different; perhaps it was the low lighting in this particular spot, the lack of glare from any of the external spotlights, but they looked brighter, more vivid than he could ever remember having seen them. Across the centre stretched the Milky Way, rotating with the rest, a single band of pale whites. Yet, his mind could not help but add colour to the scene: mauves, reds, yellows: a hundred billion different shades for a hundred billion stars, each radiating its unique light out towards infinity.

Nearer still crawled the constellations, one by one replacing each other at the centre of his vision: Corvus, Virgo, Bootes, Ursa Major. Makarov watched this last, composed of its seven principals. Once upon a time, he could have given the names of every one of those constituent stars. Now, they were just another of the countless things he had forgotten.

At the edge of the window rolled that one stroke of actual colour in the scene: the red point of Mars. Seeing it, his thoughts turned inexorably to Vogel, to that look she had had that morning. Something about it had chilled him.

And her strange behaviour afterwards...

He had a horrible feeling he knew what it all meant. They had not yet talked about what was going to happen when they reached Earth. Once the shuttle from The Martyrs deposited them at Nebo-1 Orbital Station, she was bound for Russia,

whereas he was to remain in orbit. It was not clear when they would see each other again. True, they were both ultimately required to return to Mars eventually. But that was only the first obstacle. While a secret inter-stratum relationship like theirs was possible in the privacy of the station, in public was a different matter. Vogel, with her academic ties, would be held back if it came out that she was with someone who was technically a common worker. And then there was Brantov, who had made his thoughts on the matter very clear.

Yet, these issues were all still a while away, and did not necessarily need to be fatal. But that was only Makarov's opinion. He was not going to be the one who ended up deciding things.

As he thought all this, Pavlov's words rang in his head from those months ago: 'I hope she sees something else. Otherwise, I'll have been wasting my time deleting that shit from my computer.' Had he?

He turned his eyes again upwards. The disk had achieved a full rotation, placing Ursa Major once again at the centre of gaze. Alkaid; Alcor; Alioth; Megrez; Phecda; Merak; Dubhe.

The recollection surprised him.

Ten minutes later, he was outside Vogel's room, feeling that same sense of intrusion that gripped him those four months ago.

He had expected to find her asleep, or perhaps reading by the desk lamp. But instead, he was met by the harsh bluish light of the main light. She was sat upright against the backboard, apparently having been staring into space. She looked around startled as Makarov entered. 'Hey,' she said, trying to sound casual.

'Hey,' he replied. The two embraced.

'How was work?' she asked.

'Oh, yeah. Fine.' Makarov looked at her as he seated himself on the bed. It was clear that she had been crying. She continued to gaze past him, eyes only darting intermittently to the area near his face. He drew a breath to ask if she was okay, but found he was unable to get the words out. A cold hand was wrapping itself around his stomach.

'Sergey, there's something I need to tell you.'

The words knocked into him like a tram at full speed. He felt the world begin to tilt, as if he could suddenly sense the rotation of the gravity wheel.

'Why now?' he asked. 'Why, when we still have a week to go?'

'Because I can't wait any longer,' she whimpered.

'I know it's painful. But why through it all away when there's still time left? And then, we don't know, I could get a transfer down to Earth. That would give us a least another month. After that... well, we can live each day as it comes.'

She shook her head, and that hand around him tightened still.

'Sergey, it's not like that.' She drew a fortifying breath, glancing at him. It was as if she were looking at him for the last time. Makarov did not understand. 'There's something I need to tell you. But... I'm afraid.'

'Afraid? Of what?'

'That if I tell you, you won't love me anymore.'

He stared at her, uncomprehending. Vogel glanced at him, then appeared to reach a resolution.

'I'm a spy.'

Makarov furrowed his brow as he waited for the words to acquire meaning in his brain. 'A spy? What... you mean like, for the KGB?'

'No.' She swallowed labouredly. 'For the Americans.'

He narrowed his eyes. This had to be some kind of prank. An incredibly cruel one, at that. Then a terrible thought occurred to him and he sprung from the bed. He began working his way about the perimeter of the room, searching through draws, under pieces of paper, behind regulation plaques: anywhere he could think of.

'It's okay, Sergey,' said Vogel quietly. 'I've already checked the room for bugs.'

He stopped, turning. Something about those words, the matter-of-factness to them, sent a shiver down his spine. A faint ringing had begun to sound in his ears. Could this be real?

'What do you mean: a spy?' he asked. 'Doing what?'

Vogel explained that her work for the MSSR special weapons program had given her access to the codeworded areas within the Delivery Design Bureau. That meant she was able to access the vast majority of their internal files. 'I stole what information they told me to, then passed it to them.' She let out a quiet, sardonic laugh. 'It really was just like the videos, Sergey. They contacted me twelve months ago, offering money. A lot of money. And I accepted.'

Some part of Makarov had still been clinging to the idea that this was all a joke. But as he stood there, a grim clarity began to crawl over him. His eyes travelled to the scribbled notes on the desk beside him, the ones written as if with eyes closed.

Then he thought of Vogel's reclusive behaviour, her unwillingness to interact with anyone else. And Brantov: the nervousness of the Minister over what had seemed like a simple spray-on, his strange desire for utmost secrecy. He must have been being blackmailed. Suddenly it all made sense.

Instantly, the sense of danger condensed around him, clawing at his ankles. He knew that he should not even be hearing something like this: even as a joke, such a conversation would be making him complicit. But he was glued standing to the spot. He had to understand. He could already see one thing.

'Let me guess,' he hissed. 'They also offered to get you out of the Soviet Union'

Vogel nodded, her head barely moving. 'They had to get me to US friendly territory for me to transfer them the data. That's Ecuador, apparently. They have someone who can sneak me past security here and onto the shuttle to Quito, when it comes. From there I travel to the United States to become a citizen.'

There was now no longer any room for doubt. Makarov felt anger, or something closely approximating it burst up from inside him. How could this be happening to him? 'Why would you do this?' he spat. 'And why— *the fuck* would you involve me in it!?' Immediately he stopped, a second clarity overcoming him, even more horrible than the first. He let out a humourless laugh, Vogel watching in confusion. 'Ah,' he said flatly. 'I see it. You and me; it wasn't real, was it? It was all part of the plan, so you'd know if anyone was catching on to you.'

Vogel's mouth hung open in dumb disbelief. 'No Sergey,' she said. 'That's— that's not true at all.'

Makarov looked at her, that anger still churning within him. But despite himself, he knew that she was telling the truth. He could not stop now. He cast about his mind for something hurtful to say.

'So you're just a mercenary, are you? Willing to betray your country for money? Your comrades. Selling the secrets that your own father worked on to our enemies.'

He saw that the comment had struck home. 'Does it matter to you why I did it?' she asked levelly.

'Well, you've essentially already told me. Because they were paying you.'

For the first time, Vogel's voice acquired an edge. 'It isn't for the money. It's to fuck them. Brantov and the rest, everyone who runs this rotten system of the MSSR.'

Makarov was almost amused. 'What could you possibly know about the system

from inside the Inner Party?’

Vogel fixed her gaze on him. ‘They killed him, Sergey. My father’s Alzheimer’s wasn’t untreatable. But he was making too much trouble inside the program. He didn’t think we should be pursuing weapons of aggression. Yet, those are what make Brantov and the rest their money. So they made sure he didn’t get treatment. They let him die, but not without destroying his mind first.’

She shook her head. ‘You think we don’t see what things are like from the inside? We all see. All this talk of reform, of a new Communism; as if anything has changed out there. People just stand by, because nobody has a reason to change anything. Well, they gave me a reason. When the central government finds out, they’ll be doomed.’

Makarov remained frozen, trying to comprehend this new person who was sitting before him. He had never seen her talk about anything this way before.

‘But none of that matters,’ she said quietly. She looked at him. ‘I tried to stay away from you, Sergey. I truly did. I knew that every moment we spent together, I was putting you further and further into danger. But... I couldn’t understand it. I’m so sorry. I love you. But I understand if you don’t feel the same way.’

‘Why would you involve me in this?’ he asked hoarsely. ‘You could have just left without telling me anything. Why drag me into it?’

‘I wanted to ask if you would come with me. They can take us both.’

Makarov took a moment to process the words. Before he knew it, he was already thinking about it. The images came to him uninvited. A new life, where they could go wherever they wanted: London, Paris, New York; sail in the seas of Japan, or the Mediterranean. Or go off-world, if that’s what they decided. Live in Houston, or one of the independents. He imagined himself speaking English, riding in an automobile. They could get married. He saw it all, in painful clarity. He knew that there was a world in which all this could happen, in which might be so. But his was not that world.

‘I don’t want anything to do with this treason.’

He left.

‘What difference does it make?’ he asked numbly. ‘You’re leaving and never coming back. We’re never going to see each other again.’

Vogel turned her gaze up to him, their eyes meeting for the first time. 'Sergey,' she breathed. 'They can extract both of us.'

The words arrived like a rush of cold water.

'They're supposed to make contact tomorrow,' she went on. 'Whoever is helping me will be at the dinner. I can demand they take both. I have the leverage. And they'll be able to do it, I'm certain.'

Makarov took a moment to process the words. Before he knew it, he was already thinking about it. The images came to him uninvited. A new life, where they could go wherever they wanted: London, Paris, New York; sail in the seas of Japan, or the Mediterranean. Or go off-world, if that's what they decided. Live in Houston, or one of the independents. He imagined himself speaking English, riding in an automobile. They could get married. He saw it all, in painful clarity. He knew that there was a world in which all this could happen, in which might be so. But his was not that world.

Resignedly, he shook his head and the vision cleared, giving way to the cold steel walls of the cabin about them. 'No,' he said. 'I still have people that they can hold over me: my family; my colleagues. People who will still have to deal with the KGB if I disappear. I can't leave them behind with that.'

Vogel was silent for a moment, her lips pursed. She nodded. It was clear that she had expected the answer. She swallowed resolutely.

'Well, it's settled then. I'm going to give myself up this evening.'

'What?'

'If I go through with the extraction, the KBG will investigate, and they'll discover that you knew something. The only way to avoid that is for me to give myself in now and tell them you didn't know.'

Makarov did not speak for a long time.

'No. no,' he said slowly. 'That can't be right. There isn't another way?'

She shook her head. 'I don't think there is.'

'But I mean...'

He thought, crasping around. 'Why don't you just stay? They might never even discover that anything was taken from the database.'

'It's too risky, Sergey. Besides, if I don't transfer the CIA the information, they will expose me. That's what they do to assets who betray them.'

Makarov felt the weight of the situation crushing in on him, the endless turning of the gravity wheel pulling him further and further into himself. She was right: even if somehow she could stay, and was not directly exposed, she would be at

constant risk of discovery by the KGB. And now, they both would be. They would spend the rest of their days looking over their shoulders, whether those days were together or not.

He drew a tortured breath. But for this to be the alternative.

'There must be some other option,' he repeated. 'You said that they had someone here. Perhaps you could give the information to them.'

Vogel again shook her head. 'It needs a full retrieval to get all of it.' Vogel was silent, watching the emotion occupying his face. 'Sergey,' she said. 'This is the best plan I could come up with. Anything else would place you in even greater danger than you already are.'

'So there are other plans?'

'Sergey, please.'

'Ones where you stay? Where we get more time to work this all out?'

'Only if it works. But if doesn't, or if you get caught...'

Makarov tried not to think about that. He closed his eyes. In his mind appeared two paths, etched out before him as if by some invisible hand. On the one side, there was detainment for them both, torture, maybe even death. On the other, there was a possibility. A thin, faint, translucent possibility of some kind of happiness. He needed to know the probabilities.

'What would I have to do?' he asked levelly.

Vogel drew a breath, apparently to offer further protest, then seemed to relent. She fixed her gaze on his, her green eyes meeting his blue, her expression black.

'It would require you to commit high treason.'

## 10 Race Day

[Makarov was dreaming.]

It was a fine morning. This in itself was not particularly surprising; in Gora Station most mornings were fine. But as Makarov began his final lap of Principal's Park, it occurred to him that today the climate engineers had especially outdone themselves. By combining just the right amount of lower-level air refrigeration, with precise mid-altitude moisture injection and solar filtration, they had managed to create a perfectly smooth sheet of cloud about the cylinder's central emitters. The result was a morning which was both bright and fresh, swept with a spring breeze, carrying with it that indefinable coolness which only ever occurred by chance down on the surface.

A fine day, indeed, for a race.

Makarov turned his mind back to the matter at hand, focusing on the movement of his body, and the tramp of his shoes on the shingle path. He quickened his pace, forcing his strides to match the thumping beat of his warm-up tape.

In only a few minutes, he had crested the last of the park's low hills, and come once again within sight of the boathouses. He allowed himself a brief pause to take in the view: the shimmering greens and reds of the lake, the scattering of reed-covered shallows, and the shining glass walls of the academy on the far shore. Then he set off down the slope, descending in long bounding strides. In thirty seconds he reached the bottom, passing a promenading couple as he went. Then he cut leftward into the shade of the birch trees, heading over the grass toward the boathouse entrance.

'Hey!' a distant voice filtered through his earphones. 'Hey, Sergey!'

He slowed, scanning the boathouse ahead, one headphone removed. Then, seeing there nobody who could have called him, he looked around. In a moment he had spotted her: a young woman, one of the pair he had taken for a couple, stood gesturing to him from the foot of the slope. The man, who was much older, stood in bemused silence on the path a little way behind her. He jogged back.

'Sorry Polina,' he panted, meeting her at the birch line. 'Didn't see you there.'

She made a sound of false incredulity. 'Didn't see me? You ran right past, you madman.'

Makarov shrugged. 'Guess I was concentrating.'

Polina glanced at his water shorts, then across at the bustling preparations taking place outside the boathouse. 'Take it today's the big day, is it?'

'Certainly is. I did tell you when it was.'

'Yeah but you know I switch off when you talk about rowing.'

They began walking back to the path and to the waiting man, who Polina explained was her father. He was visiting, and had just arrived at the station yesterday. 'I think you two will get along.'

As they neared, Makarov saw the man more clearly. He looked about fifty, with a grey pony-tail, and like many of the park pedestrians was dressed in uniform. Unlike them, though, it was not in the colours of the Fleet. Rather, it was a pattern of cyan and basil green, which Makarov recalled as representing the Airbourne Forces. The collar indicated him as a colonel, while stitched across his chest was a menagerie of impressive-looking ribbons and medals.

Polina introduced them. 'Ah, so this is Sergey,' he said warmly, extending a hand.

Makarov took it. 'You know of me, Comrade Sokolov?'

'I should say so. Polina tells me you're one of the best in your unit.'

Polina looked at him. 'You gonna deny it?' she asked.

'Well, so they tell me.'

Sokolov smiled. 'A modest man. That bodes well for us all.' He gestured to the activity at the boathouse. 'So, perhaps you can explain what all this is that's going on. Polina couldn't tell me anything.'

'It's the annual Inter-Branch, sir. We race the red fleet cadets at the end of every academic year. It's a bit of a tradition.'

Sokolov nodded approvingly. 'It's a nice idea. And a fine day for it too.' He looked briefly out across the waters. 'Is that a Gagaringrad accent I detect?'

'That's right, sir.' They talked on for several minutes, Makarov lying about his childhood in the MSSR, as he was well accustomed to doing. Sokolov asked whether it had been hard getting on the cadet program, and about the expeditions and training specialisms he had chosen, listening to the answers with rapt attention. If only he could get his troopers through such a program, he mused.

'So, tell me,' he eventually asked. 'Now that you've made it to the end of all that, what comes next for Sergey Makarov?'

Makarov cleared his throat, and looked at Polina. 'Well, it's not set in stone, sir. But it's looking like I'll be joining the next Saturn expedition.'

Sokolov raised his eyebrows. 'Saturn? Already? That's impressive.'

'I suppose it is, sir.'

Polina blew out her cheeks in exaggerated bitterness. 'Makes me look pretty disappointing, huh? When all I'll be doing is guinea-pigging on Luna for the self-sufficiency scientists.'

Sokolov looked at her, suddenly very serious. 'Wherever you are, Polina,' he said sternly. 'Whatever you're doing, you'll be a graduate of the Soviet Academy of Cosmonautics. And I, Alexi Sokolov, will remain the proudest father in the entire solar system.'

'Alright Dad,' replied Polina smally. 'I know. It was just a joke.'

Sokolov put an arm around her shoulder and pulled her into him. She allowed it. 'Has Polina ever told you about her Saltanova phase?' he asked.

Makarov shook his head. 'I don't believe so, sir.'

'Back when she was in primary school.' He paused. 'How old must you have been, Polina? Seven? Anyway, for about six months continuously, she insisted on going into school dressed up as a cosmonaut. Every single damn day. And if anyone called her by her real name, she'd snap at them: No. I'm Saltanova! Call me Saltanova! I'm going to be a cosmonaut. Used to get in trouble with your teachers, didn't you? They said you weren't being realistic.'

Polina pulled a face. Sokolov just smiled down at her. 'But you've done it. After all that trying. A real cosmonaut.'

She squirmed, releasing herself from his grasp. 'Alright Dad, that's enough.' She looked apologetically at Makarov. 'I think we've bothered Sergey long enough. He's got a race to win, after all.'

Sokolov nodded in agreement. 'Of course. Well, it was nice to meet you, Comrade Makarov. Hopefully, we'll meet again at some point.'

Makarov returned the sentiments. 'Do you plan to attend the graduation ceremony next month?'

The colonel sighed. 'Yes, I would have liked to. But unfortunately, I have to be back at Venus for an exercise in a couple of months. Polina knows my thoughts on that. But I'll be watching every second of the recording for her like a hawk.'

*10 Race Day*

They've put her right up the second row, you know?'

Makarov said he had heard and agreed it was a shame. He insisted recordings were very good, though. Then they bid each other farewell.

As the pair set off walking, Polina holding her father by the arm, Makarov noticed that the latter was limping. With each step, his right leg swung stiffly in and under, lifting up his entire body. A war wound, perhaps. But the man's face gave no indication of any discomfort. Instead, he trod determinedly on, his head fixed on the way ahead.

'See you later, Sergey,' Polina called over her shoulder. 'And good luck!'

END OF PART I

## Part II

### The Bomb

## 11 Freedom Dividend

Vogel knew that she had made a mistake. Who wore mules for something like this? She reached down, massaging the side of her foot, wincing as she touched the painful blister.

Reaching a lamp post, she stopped to properly adjust the straps, hoping this might buy her until the end of the walk. As she did, she scanned the street furtively behind her. Of course, she was unlikely to see anything, even if she was being followed. But it was a relief to see only the blank, preoccupied faces of the constantly renewing stream of Gagaringraders; nobody so much as glanced in her direction.

Not long now, she told herself. She had had to change tram three times that morning, crisscrossing the central sectors of the city in a way that was supposed to look unassuming to the city's security computers. In all, she had probably walked over twelve kilometres. Now, finally, the natural flow was carrying her to her destination.

Five minutes later, she took a right into Novikov Park. After following the path a short way, she seated herself on one of the benches, the flat waters of the pond stretching before her. Beyond the trees on the far bank, a series of identical apartment blocks jutted up. Past the television news program being displayed on its side, Vogel searched the top floor of the closest until she saw it: a red towel slung over one of the balconies.

She settled in. As casually as she could, she pulled out her reader, pretending to be engrossed in a short story. Every half a minute or so, she looked up to check if the item was still there. Each time, her anxiety grew infinitesimally greater; what if they couldn't go through with today? Worse, what if she had been discovered?

She kept these thoughts in check, though, a skill the last twelve months had forced her to acquire. And lo, on the eleventh time of looking, the red square had vanished. Wasting no time, she collected her things and strode from the park, heading for the stairs to the lower decks.

The man who had introduced himself as Boris let her in, greeting her awkwardly. In what was now a well-established practice, she went to wait in the living room, while he returned to tinkering out of sight.

The inflatable armchair into which she sank was one of the only pieces of furniture in the windowless apartment, kept company by an old, frayed sofa pushed against one wall. Flecks of green paint populated the linoleum floor, having escaped the metal walls and ceiling. Occasionally, one of these turned over in the dry, tyrannical blast that was the centralised air conditioning. Vogel shivered, pulling her jacket tighter around her.

Shortly the front door opened again and a woman in her fifties stepped through, dressed in the overalls of one of the city engineering departments. The name badge read: Sofia Jurowski.

'Getting good at this, aren't you Dr Vogel?' she said, dropping a pair of computer-aided infrared goggles on the beaten-up sofa. Like Boris, she wore a mask and pair of large, obscuring sunglasses.

'I am?'

'I'd say so. You looked almost completely natural out there.'

'Well, thanks,' said Vogel, standing.

'Last session. How does it feel?'

It was dangerous to waste time. Once Sofia had washed her hands, they entered the bedroom. The space was lit by a single lamp, the sunlight emulator having been switched off. Next to the rusted bed frame and sagging mattress had been positioned the kitchen table, its top occupied by a large open suitcase. Inside this was a network of black and grey wiring connected to an oblong machine with a keyboard and display. Boris, who had been examining the display, stood as they entered and moved the head of the bed. From the pillow, he lifted a translucent swimming-cap-like object, connected by thin coiled threads to the machine. With one hand, he checked the connection.

In a well-rehearsed motion, Vogel laid down, shimmying upwards until her head rested on the pillow underneath the cap.

'Do you need water before we get started?' asked Sofia.

'No, I'm fine thanks.'

'Okay.' She nodded to Boris. The latter lowered the cap onto Vogel's head, stretching it over her scalp and securing it tightly with the chin strap. She felt the cold points of the electrodes interface with the skin under her hair.

He moved to her side. 'I have to check that you're still not taking any psychoactive medications, Ms Vogel.'

'I'm not taking any.'

'No paracetamol, ibuprofen, or cannabinoids?'

She shook her head, as best she could. He made a note. 'And would you like me to re-explain any part of the procedure? Bear in mind that memory locking is most effective when the recipient is fully comfortable and clear with the process.'

'It's okay. I remember.'

Boris nodded. Sofia lightly pulled up one of the dining chairs, sitting down. 'Just to let you know, this last session might be a bit more rocky than the others. That's because we're having to re-consolidate anything from before, as well as any new data you pulled from last time.' She put a hand on Vogel's arm. 'Just remember, we'll both be here the whole time looking after you. And before you know it, it'll be over.'

Vogel tried to offer a smile. 'Right.'

'Do you have any last things you want to ask?'

She said that she was ready. Boris disappeared for a moment, then returned with a pair of thick, rectangular goggles. He put them on her, occluding her entire vision in darkness. A moment later, she felt cool metal as two response holds were pressed into her hands.

There was a loud click and whirr. Slowly, the blackness inside the goggles faded to a murky grey, then climbed toward a bright white. As the whirring from the machine intensified, she began to taste metal. *Here we go again*, she thought. *One last time*.

Two black digits appeared close before her eyes:

30, 29, 28...

They seemed almost infinitely near, as if they were inside her eyeballs themselves. As the count descended, the muttered coordinations of Boris and Sofia started to fade away.

Vogel found that she was gripping the handholds hard. She tried to relax, to think of the warmth of the park above them, the birds swimming in the open green waters. She thought of the lines of ducklings that she had seen that morning. Wait, ducklings in October? That couldn't be right. She strained her mind. No, that had been the fourth time.

## 11 *Freedom Dividend*

Her attention was drawn back to the numbers.

21, 20, 19...

She wondered why Boris hadn't explained what would happen when they reached zero. Had he not wanted to scare her? Gradually, a black fear began to spread through her. Why hadn't she prepared better for this?

16, 15, 14...

Suddenly, she remembered everything. They had killed him. And for what? Nothing.

'Dad!' she cried.

She had slipped on the moist concrete by the South reservoir. In a moment she was under the water, the black surface wrapping itself around her, muffling the sound of the splash. Her arms flailed uselessly as her backpack started to drag her down. She barely had time to draw half a breath before she was looking at the bottoms of ducks swimming agitatedly overhead. 'Dad!' she tried to shout again with the remaining air in her lungs, but the sound remained trapped inside her. A heartbeat later, there was a second splash. A hand reached down towards her, grabbing her by the jacket.

13, 12, 11...

What was going on? Where was she? For a moment these questions faded away, then burst back with renewed ferocity. She screwed her eyes closed, but the numbers followed her into the darkness. The metal taste clawed at her tongue. When would it end?

Wearily, she massaged her forehead, trying to purge the tiredness from her facial muscles. She wondered where this sudden sense of disorientation had come from. Then she forced herself back to reality, stepping forward. The plastic front of the Krasny vending machine reflected the orange glow of evening from outside, requiring her to squint as she examined its contents.

Keying in the code, she presented her wrist. From within the metal box came a whirring, and the familiar assortment of chocolates, drinks, and nuts shifted as a can of Worx Soda fell, landing with a heavy thud. She stooped, and with cargo in hand set off back across the cafeteria. By now it was almost deserted, a

forest of chairs upon tables, with servery stripped and bare, awaiting the cleaning drones. As she walked, she could just about hear the faint echoing of her shoes on the floor, coming off the far wall. Above her, past the main staircase, could be detected a few isolated voices passing back and forth, wishing each other good an evening. Otherwise all was deserted.

Reaching the bottom of the stairs, she began her ascent, passing the great pillar windows which formed one wall of the atrium of the Institute of Physics, and through which could be seen all of Gagaringrad. As she climbed, that nervous knot in her stomach which had existed the whole day began to tighten. At the central landing she paused, fortifying herself with several large gulps of Worx soda.

Footsteps breached the silence, and she turned to see Boris Scriabin leaving one of the nearby offices, making his way toward the stairs, rucksack slung over one shoulder. He was a junior researcher, like her. Since they had talked at the Christmas party last month, he seemed to have developed a talent for running into her.

‘Evening Nina,’ he said brightly, coming to a stop upon the landing.

‘Hi Nikita,’ she replied wearily.

‘How are things?’

‘Could be worse. Yourself?’

‘I’m good. Are you coming to the Cold Stone tonight?’

Vogel looked at him. ‘Cold stone?’

‘The bar,’ hesitated Nikita. ‘You know, for the social. You did get Dmitri’s invite, right?’

‘Oh, right,’ said Vogel, suddenly recalling. ‘Yes, I got it. But I’m afraid I can’t. Bernecker’s asked me to work late again.’

‘Ah, that’s a shame,’ replied Nikita, deflating slightly. He looked furtively about, speaking in a low voice. ‘Why’s she picking on you so much lately?’

‘Wish I knew,’ replied Vogel, maintaining the act. ‘For the moment I’m just choosing to take it as a compliment.’

‘Ah. That’s a good idea,’ said Nikita. ‘Well, I suppose maybe I’ll catch you at the next one.’

‘Hopefully,’ she replied.

The two parted in their opposite directions, Vogel continuing her climb until she reached the catwalk ringing the third floor. Half a minute later, she was at the

info-lock door.

Finishing the last of the can, she dropped it in the provided bin, then presented her pass to the reader. A buzzer sounded as the enormous door opened, and she stepped through into the trap space. Per the electronic instructions issued through the two-way speaker, she took her place on the painted cross, then did a slow three-sixty turn. There was a low clicking as the neutrino bulbs photographed her, probing for anything electronic within her person. Shortly the buzzer sounded again, lights turning green, and she was allowed through the second thick steel door.

Just another day at the office, she told herself, trying to soothe her now thumping heart. She walked the last section of the corridor, then reached her space. It was a long, low room, windowless, with grey dividers sectioning its fifty or so desks. In many of the walking spaces stood moveable whiteboards, some with equations still scrawled upon them.

She set off for her desk, situated at the far side of the room. As she walked, she scanned for any remaining occupants. By the time she arrived, she had counted three, but a half-dozen lit computer monitors indicated that there were probably more people still around who she would have to keep track of. Those numbers were not ideal. But if she waited any longer, she risked more awkward questions being asked about her work schedule. Plus, she would need as much of the evening afterwards as possible for the retention exercises for what she was about to learn. It had to be now.

Trying remain silent, she pulled out her roller-chair and sat down. For a few seconds she was still, eyes closed, smelling the sickly lemon of mould-killer on her coat beside her. It was only the latest victim in the infestation which had overtaken her apartment block, and which the Ministry of Housing had seen fit to do nothing about. Vogel wondered if such things would ever happen when she reached America.

Enough procrastinating.

She leant forward and carefully pulled open the bottom draw of her desk. A moment's fishing and she had it, her hand coming away with the grey square of the memory disk. It was featureless, but for a blank paper label reading: backup. After all this time, she still had no idea how they had got it past the neutrino bulbs. An insider in the security team maybe. But then, surely they too were searched.

All she knew was that, four months ago, she had found it in her bottom drawer,

just like she had been told she would. Until that point, this whole thing had half seemed like a dream. But the moment she had felt that sharp corner, seen that label, it had all suddenly become very real.

Once more she listened, slowly leaning back to look past the desk dividers. Nobody was moving, and the only speaking came from old Jodorowsky as he swore his way through a piece of code. It was as good a chance as she could hope for. Holding the disk at arm's length, as if its criminality fell off with the square of distance, she fed it into her computer, then cringed instinctively as it made its loud whirring sounds of acceptance.

Quickly, she opened up the machine's universal terminal. Now as always, only a single command was required:

*dig*

Immediately the worm went to work, searching the width of the network for anything resembling its target class. In only a few seconds it had made its first catch. A text file swept open, filling her entire monitor. Not wasting a moment, Vogel began scanning the page as fast as her eyes could move. It was not necessary to actually absorb the information; indeed trying to do so might actually undermine retention, she had been told. The trick was to ensure that each of the letters and figures got exposed to her retina in turn. Now, on her sixth time of doing this, she had become quite good at it.

But even so, it was impossible not to catch some crumbs of meaning: focussing bridge realignment; couples instability; high-turn-rate correction. Fragments of some distant debate, hidden from all by the best firewalls the intelligence services had to offer. Under different circumstances, Vogel would have been intensely curious about what was being said. But right now all she cared about was this being over.

Finishing the first document, she pressed enter and the worm deleted any trace of her presence. Then it proceeded to bring up the next item, which it had already prepared. Vogel stared at the screen, forcing her eyes to maintain the sweeping motion she had practised so many times; on books, magazines, billboards.

Soon she was onto the third document. She checked the time. Sixteen minutes before the worm aborted itself. This was a built-in security feature, designed so as to not arouse the suspicion of the defence AIs sleeplessly stalking the network. For the same reason, upon ejecting itself, the disk would remain unusable for two

months. For this reason, she could not afford to waste a single moment if she was to reach her quota.

Fifteen minutes later, she finished the twelfth document and readied for what would surely be her final run. Momentarily resting her sore eyes, she settled her gaze on the photograph stood at the inner corner of her desk. It was the one of her and her father. Now, it reminded her every day of why she was doing what she was doing.

She turned back to the document, straining her eyes against the growing fatigue. After a few moments, she relented and paused. Why was it getting so difficult?

Even as she sat, her mind started to wander. She shivered, an inexplicable coldness settling over her. Was something wrong with the air conditioning, she wondered? Reaching for her coat, her eyes again lingering on the photograph, the two figures smiling out from beneath their hoods, the snowy Siberian landscape stretching behind them.

A chill breeze swept past her, displacing a loose paper from the desk. She watched absent-mindedly as it zig-zagged its way to the floor, landing with a soft skid.

'Can we shut the door yet, Dad?' she asked.



One by one, the sounds of the room painted themselves back in: first the fevered whirring of the computer, then the muttering, followed by the blow of the ventilation. The goggles were removed, leaving an oval of immobile sweat around Vogel's eyes. Boris wiped it away with a moist flannel and set about freeing her from the electrode cap.

'Welcome back, Dr Vogel,' said Sofia smiling from behind the monitor of the machine. 'That was some excellent work in there.'

Vogel looked at her watch, the motion taking much of her energy. Fifty minutes had passed. 'Did I get what you wanted?' she asked.

'Certainly looks like it.' Sofia folded a piece of paper. 'Obviously, they won't know for sure until they perform the full retrieval. But what matters is that the data quality here is really outstanding. You've done your job, that's clear.'

Vogel nodded. She could not shake the feeling that something had happened in there. Something important. But she could not recall anything after the start of the countdown. With an effort, she sat up.

'So this will last me until I get to Earth?' she asked.

'Yes,' replied Boris, starting to pack away the machinery. 'So long as you keep performing the retention exercises, the memory lock should buy six months before any data decay starts to set in.'

'Six months is enough?'

Sofia nodded, handing her a tumbler of water. She waited pointedly for her to drink, then retrieved it. 'Now that we're done, I can reveal the nature of your extraction plan.'

Vogel listened intently.

'They're going to get you onto an Earthbound cycler: The Martyrs of Córdoba. It arrives here in a month. Apparently there'll be someone on there who will make sure you get aboard a shuttle for Ecuador at the far end.'

Vogel swallowed. It was finally happening: she was making her exit. She could not help but again marvel at the complexity of the operation. She wondered if they had to do something like this every time they wanted information about a Soviet program. It was a testament to her nation's counter-intelligence services that the Americans could not even briefly get a full retrieval unit into the country. Apparently, it was easier for them to get her out first.

'The final details will be delivered to you closer to the time,' finished Sofia.

'Is there anything I should do in the meantime?' asked Vogel, trying to take everything in. 'Other than the exercises.'

'Of course,' said Sofia with a smile. 'Work out what you're going to do with your brand new life as a US citizen.'

## 12 Dinner on the Farside

[Change to Vogel's POV. She decides to transfer the information and turn herself in, protecting Makarov. She finds Sanchez at the party, surmises that she is the spy, and gives her the documents. She tells her that she is not coming. Sanchez tries to dissuade her but says that she understands.]

Vogel did not sleep. She needed to transfer the files.

She had been up all night.

She went to Makarov's room, but he was already out. She back to hers and tried to sleep. But she failed.

Sanchez met them at the start of the path. They walked to the house.

'To our comrades, co-voyagers of The Martyrs,' boomed Bueno from the end of the table, glass held high. 'Without whom, we who dwell between the worlds would surely be lost. We give thanks to God and to the Revolution for your presence.'

The Soviet party murmured in polite response, some exchanging bemused glances. The Soviet mind had never been able to grasp the contradictory theistic socialism of the South Americans.

As Bueno lowered himself into his seat, the starter was brought out: vegetable soup with seed croutons, accompanied by garlic fried locust, spiced potato, and lentil cake. Even in her distracted state, Vogel found her system relieved to not be confronted by rehydrated food for once.

Yet, she had little appetite. Trying not to see the dishes, the fancy dress, the finely carved decor of the dining hall, she committed every ounce of her energy to monitoring the conversations about her, waiting for a sign to present itself.

There was no seating plan, but the single long table had fractionalised approximately by rank. The basic technicians and apprentices from both the Soviet and Ecuadorian parties sat at one end, with the more skilled or experienced personnel in the middle. At the other, nearest the great bay window looking out upon the

gardens, were seated the senior officers and specialists, which included Vogel. She was positioned immediately across from Governess Bueno, the settlers' chief of logistics to her left, and Marshall Commissar Overchuk to her right. The commissar had replaced his black uniform with a beige suit.

'I must say, Ms Vogel,' said Mrs Bueno warmly, swirling her wine with one hand. 'I was quite worried when I heard we were going to be transporting relativistic explosives on this run. But that presentation you gave when you came aboard—which I don't think I ever thanked you for—really helped me understand how little danger we are in. So, thank you.'

Vogel put down her glass, which she had been nursing. 'I'm glad that I was of some use,' she replied politely, trying simultaneously to keep track of another discussion occurring to her right.

'What's this?' grunted Overchuk, leaning past his plate. 'You guys are lugging nukes on this flight? Nobody told me.'

'Not nukes,' said Bueno. 'Relativistic mining explosives.'

'There's a difference?'

Mrs Bueno glanced light-heartedly at Vogel. 'Let me see if I recall Ms Vogel's safety presentation: the RE works by creating a black hole the mass of a kilogram and the size of a proton. That's correct?'

Vogel nodded. 'As for your question,' she said to Overchuk, 'it wasn't put on the official roster, I believe.'

'Well I saw one of those go off once,' the commissar said defiantly. 'Sure looked a lot like a fucking nuke to me.'

'Ms Vogel?'

Vogel dragged her attention back to the conversation. 'The singularity only lasts for a fraction of a second,' she explained. 'Then its entire mass evaporates into gamma radiation. You're right; it ends up functioning much like a nuke. But it doesn't produce the same fission products. That's why they tend to use them for excavation and civil engineering.'

'Well,' said the commissar, leaning back in his chair. 'Fucking learn something new every day, dontcha? So you're a physicist or something?'

Vogel shook her head. 'No. I just work on the safety engineering.'

'Huh. I remember seeing that there was a physicist aboard this thing. That *was* in the roster.'

Gradually, Vogel's attention curled around. She spoke slowly. 'Yes, that would

be my colleague: Comrade Makarov.'

'Makarov.' Overchuk snapped his fingers. 'That's the one. I don't see him here.'

Vogel froze. Was this the signal she had waited for? She watched the commissar carefully.

'I think he had some kind of accident,' the signals officer chipped in.

'Oh dear. That's a shame.'

Vogel continued to watch, trying to judge the nature of the reaction. All of a sudden, she realised how much sense it would make for Overchuk to be the infiltrator. It would be the perfect cover. And the note had been received soon after he came aboard.

But what if she was wrong? She could not think of a worse person to give herself away to. She recalled his treatment of the prisoners. That would be him. Worse, it would be Makarov. Could she really risk subjecting them to that?

'Well, I hope it was worth the trouble of moving those explosives,' said Mrs Bueno. 'I understand that they're intended for blasting operations on the M—'

A booming voice issued down the table. 'Isabella! You're not talking shop with our guests again are you?' Vogel turned to see Governor Bueno gesticulating from his chair, the gold cufflinks of his white suit flashing as he waved a chubby finger. 'You must excuse my wife, Comrade,' he said, now addressing Vogel. 'Sometimes it seems all she can talk about is timber and genetic splicing!'

'Oh, quiet down old man!' came Mrs. Bueno's jovial reply. 'Would you rather I not thank our friend for keeping us all safe?'

'Oh. Of course.' The governor bowed his head theatrically, displaying his shiny cranium. 'My apologies mi querida. Yes, we are most grateful, ma'am! In fact... Stewards! More wine for this woman!'

Vogel quietly declined the bottle which was offered over her shoulder.

After dessert, port was passed around. The governor made another short speech, wishing them a trouble-free final five days until Earth and a speedy transfer into planetary orbit. Then the diners were invited to mingle.

Vogel wound her way slowly back and forth between the various groups, exchanging cordial comments, trying to find anything that might steer her away from her current trajectory of confronting Overchuk. But her efforts returned nothing.

The old grandfather clock at the centre of the room struck the eight chimes

of twenty o'clock. Time was running out until the party ended. The infiltrator, whoever they were, would already know that Makarov was not coming. They might even have already contacted their superiors. If she was going to get the information to them, she had to do it in the next half hour.

As the last round of drinks was poured, Vogel made her way to the nearest bathroom. Inside, she retrieved the envelope from her suit pocket, re-examining it. It was a state; grimy from her palm, soft from endless bending and unbending inside her pocket. Was she really going to do this? She didn't seem to have any other option. She had made her commitment now: Makarov was in hibernation, unable to protect her. If he was exposed, she would be too. Of all the options, Overchuk made the most sense. It would have to be him.

A noise from outside disturbed her. Quickly she folded the envelope and left. In the corridor she found two Russian technicians, one muttering incoherently, the other supporting him.

'Is he alright?' Vogel asked.

'Oh, don't worry about him ma'am. Gravity's just a little strong for him this side of the disk. That's all.'

The two disappeared inside.

Vogel returned to the dining room. She saw through the open bay windows that Overchuk was outside smoking. Crossing the room, she exited out onto the open patio, before realising that the commissar was not alone. Beside him was Sánchez, listening politely to some kind of long story.

Subtly switching course, she made her way to the edge of the patio as if she had always been headed there. She felt her anxiety climb to a fever pitch.

'Beautiful, isn't it, Ms. Vogel?' a voice said.

She looked round, and to her surprise saw Sánchez beside her. It took her a moment to register what she had said. 'Yes,' she replied evasively, looking out at the scene. 'It's very pleasant.'

Sánchez seemed undeterred. 'This is the section of the disk where they grow their food. Apparently, Governor Bueno plans to cultivate the entire disk like this when they've fulfilled their current soil contract. I think they plan to grow olives.'

'I'm sure it'll be very nice,' Vogel replied. She tried to think how she could extract herself from the conversation. She risked a glance towards Overchuk. He was still there.

12 *Dinner on the Farside*

'Nice to get away from the Soviet Union, huh?'

Yes. There it was; unmistakable.

'Are you — it?'

'I don't know what you are talking about.'

She made a decision and gave her the envelope. 'I'm not coming. This is everything.'

'Okay,' said Sanchez. It seemed genuine.

Vogel returned to Makarov. It seemed everything was going to be okay.

## 13 The Sickness

Vogel felt ill. She collapsed.

## 14 Departure

Makarov acted in a malaise.

Their last days aboard the station passed quickly.

In a mirror image of the events of the departure from Mars, lines of tents were erected inside the hab disk; temporary hygiene facilities were activated; rehydrated food was stockpiled. Then, finally, the passengers were awakened, cohort by cohort over several days. Soon, the air above the jungle was chattering with the sound of humanity: laughter, the cheers of football games; impromptu musical sessions. Trinkets were exchanged for trinkets; stories for stories.

All the while, Earth bore down upon them, growing from a distant marble to a vast, detailed world dominating their entire forward horizon.

As they passed inside of Lunar orbit, the shuttles began to set off to meet them.

Makarov was certain that Vogel had been captured by the KGB.

Makarov watched the first of these dock, floating in on imaginary tracks, guided by its electrothermo thrusters. This was the shuttle Vogel had been destined to be aboard: one of two headed for Ecuadorian territory. Part of him could not relax until he knew it was gone.

In a little over an hour it had made contact, exchanged its cargo, and taken aboard its complement of passengers. Then it vanished, its nuclear engines burning back towards the planet.

A half a dozen more followed, hailing from various bases in LEO. For eighteen hours, the station was a hive of frenzied activity, each shuttle being docked and loaded as swiftly as possible. Soon only one group remained. This consisted mostly of the crew, which included Makarov and Vogel, as well as some remaining passengers headed for Orel station.

Makarov waited in the cargo office as the final craft approached, witnessing as the ordinance package was packed for loading. Earth, their destination, hung enormous below. The illumination of its partly lit face would have been blinding

if not for the tinted glass. It was impossible not to be impressed by the sight. In breaks in the task, Makarov gazed down, struck by the thought that he was at that moment looking down at ninety-seven per cent of humanity. Almost everything that had ever happened had happened right here. Every war, every famine, every genocide.

Yet, it was beautiful. He had forgotten just how blue it really was. Clouds the size of continents swirled, covering and uncovering great canals of green, white, and grey. Against the azure haze of the sunlit horizon, mass driver launch loops lit up like a spider's webs, their ground tethers drooping away like the legs of an enormous centipede. On the far edge, cities glowed, highways lighting up the atmosphere above them. Civilisation, he thought. Built upon civilisation, built upon civilisation.

The Martyrs of Córdoba was barrelling past at over six kilometers a second. Soon the station would again be alone, embarking on the next phase of its long journey around the Sun. It would be a year and a half standard before it again encountered humanity, on Mars.

He had to see her one last time.

*'Fifteen minutes until docking. All departing personnel, report to the embarkation terminal.'*

With the packing complete, Makarov hurried towards the terminal, traversing the grimy corridors of the dock area. Just before exiting, however, he took a right. He could not leave without seeing her.

The passage carried him a short way to the hibernation holding bay. This was little more than a storage room, fitted with safety enclosures and monitoring facilities. Here were kept the passengers who needed to board the next flight asleep, typically because they required special facilities to be awakened from hibernation safely.

A clattering from the open door told him somebody, presumably the doc, was still at work inside. Having no desire to be seen, Makarov peaked tentatively as far as the first few enclosures: wide metal cages, each holding two sleepers. The pairs of white faces inside were visible. Each had an opaque respirator mask covering their nose and mouth, leaving only the eyes and grey forehead visible. The rest of the body was covered in a thick black nylon bag, designed to regulate temperature.

Slowly, he edged toward the door. One by one, more cages came into view, each with its own pair of faces. Until:

There she was.

He could not help his stomach tightening at the sight: Vogel's head hovering behind the mesh, lashes pressed placidly together. It was the first time he had seen her since she had requested to be put under. Her face stood out from the others by its still natural colour, a symptom of the recentness of her hibernation, contrasting with the corpselike hues lined on both sides. Compared to them, she appeared to glow.

The figure next to her could only be one of the convicts. He had a black bag over his head, turning the insulation bag into a whole-body cocoon. Makarov reflected grimly on the sight: the kind, gentle Vogel, sharing the same enclosure as a dangerous criminal. Hopefully, it would not be for long.

*'Nominated flight personnel to AL2,'* announced the tannoy. *'Departure in ten minutes.'*

He allowed himself one more longing look at that distant face. He would see her soon enough, he told himself. Then he went to leave.

No sooner had he grasped the handhold to push himself back towards the terminal, when the source of the earlier noise suddenly emerged from the hibernation bay. Dismay reached Makarov as he saw not the white outfit of the doc, but the black cap and body armour of Commissar Overchuk.

*'Evening!'* called the commissar brightly.

*'Evening,'* echoed Makarov. As the commissar busied himself with the bay door's closing mechanism, Makarov went subtly to propel himself away. But before he could move, he was called to:

*'Don't suppose you know how to work these fucking types of doors, do you?'*

*'Uh. Sure.'* He headed back. *'It doesn't say, but you have to hold the button down,'* he said, demonstrating. *'Like this.'*

Overchuk tried it and the door slid closed. *'Huh, how about that?'*

Makarov hovered, wondering whether he was excused. Overchuk reached into his jacket pocket and produced a packet of cigarettes. He tilted them towards Makarov, who declined. *'Just a social smoker, eh?'* The commissar shrugged and lit his own. He took a deep pull, settling himself against the padded wall. *'Must be looking forward to getting off of this thing,'* he said, cigarette clasped between his lips. As he spoke, flecks of ash were catapulted into the air about them, carried

gently by the current.

'I suppose so, Comrade Commissar,' Makarov replied.

'Only suppose?' grunted Overchuk. 'Cos I was only here five days and I've been bored out of my fucking head.'

'It's true; there's not a great deal to do,' Makarov admitted. 'But I suppose you get used to it.'

Overchuk scoffed. 'You do?'

He took another drag.

'Your colleague,' he said, tapping the bay door beside them. Makarov tensed. 'The physicist. She's your spray-on, right?'

'Uh, yes. She is.'

'Prophylactic hibernation due to acute stroke risk.'

Makarov shifted. 'Yes, I had heard about that.'

Overchuk plucked the hibernation roster from its nearby holder and began absent-mindedly looking down the list. Makarov watched him blink hard several times, presumably activating some kind of implanted head-up display. 'Makes me wonder, though—' he mused as his eyes flickered down the page '—why a spray-on would choose to do a trip like this awake in the first place.'

Only after a glance up did Makarov realise an answer was expected from him. With a half-forced hesitancy, he ventured: 'I believe it had something to do with a family tragedy.'

'A family tragedy? Huh.' Overchuk peered for a moment into cyberspace. 'See, this is why you can't rely on those fucking pen-pushers in Record Compilation. Not a single mention of that in here. Fucking amateurs.'

'Well,' Makarov added cautiously, '—that's just what she mentioned to me.'

'I'm sure you're right, Comrade.' Overchuk blinked away his HUD and replaced the clipboard. 'Was there anything else she talked to you about?'

'Like what?'

Overchuk shrugged. 'Anything.'

Makarov felt the faintest hint of some kind of cage closing in around him. 'No. Not really. Just a bit on the shuttle ride in.'

'I see.'

'*Five minutes until docking,*' insisted the tannoy. '*All departing personnel, report to the embarkation terminal.*'

'Well,' said Overchuk lightly. 'How about we return to this on th—'

The lights had gone out.

'What the fuck?' Makarov heard from beside him.

They had been plunged into complete darkness. He cast his head about, seeing only the dim fluorescence of the emergency signs, and the glowing O of Overchuk's cigarette, which was extinguished a moment later. Around them, the ever-present whirring of the station ventilation began to fade, the fans rattling down. 'Local transformer must have failed,' Makarov observed.

'Maybe.'

A few seconds later, the section emergency lighting activated, flickering on along the corridor. A small portion of the air vents restarted their whirring. Overchuk was again visible, and as Makarov's eyes adjusted, he saw he had drawn his pistol.

'Do you need that?' he asked, a growing feeling of apprehension occupying him.

The commissar raised a hand. 'Quiet, Comrade.'

Makarov listened. Then he heard it: the sound of distant shouting. Then came a nearby cry, clear and loud. Immediately Overchuk was fully alert, flicking his fingerprint safety off. He indicated Makarov to get behind cover.

Wedging himself in a nearby gap in the lockers, Makarov was just about able to still see down the corridor. Overchuk was in a similar gap on the opposite side, pistol arm bent. There they waited. The shouting had stopped now, quiet once again ruling the corridor. Painfully cold air bit into the back of Makarov's neck from the vent behind him. But he did not move. Adrenalin was filling his system, without his even knowing why.

An orange reflection appeared in the polished metal at the end of the corridor. Overchuk tensed, raising his weapon. 'Halt right there!' he shouted. 'Who—'

A burst of automatic fire cut him short. Bullets ricocheted deafeningly off the metal around and behind them, filling the air with fragments of plastic and fibre-glass. Instinctively, Makarov forced himself into the gap as far as he could go, cringing as the shots impacted around him. Blind confusion and terror coursed through him.

The burst came to an end, and almost immediately two much louder shots rang out, presumably Overchuk returning fire. No sooner was the second released, when another burst arrived. In Makarov's peripheral vision he saw a bloom of red, and the commissar's span into the open, long tendrils of blood trailing from

his side.

The gunfire ceased, and through the ringing in his ears, Makarov heard muffled shouting from along the corridor.

The muzzle of a submachinegun appeared around the corner, pointed at his face. 'HANDS UP!' the orange figure shouted in accented Russian. 'HANDS UP OR I WILL FIRE!'

Makarov raised his hands. 'I'm not armed!' he managed to yell. The wielder of the gun lunged forward and dragged him from the gap. He felt a rip at his collar. For a moment he was face to face with a rubber gas mask, peering into the two dead disks of its integrated night vision goggles. Then, with a brutal kick to the abdomen, he was sent whirling down the passage away from his assailant.

Gasping and half-dazed, he caught himself just past the entrance to the hibernation bay, his injured side slamming into the wall. He turned and looked down the corridor after him, seeing the masked figure advancing, weapon still raised. 'STAY RIGHT THERE! DON'T MOVE!' It was a female voice, he now realised. The bright orange suit it wore was one of those used by the Ecuadorians.

It fired several times, the bullets ripping past Makarov's right shoulder and shattering a CCTV camera at the far end of the corridor.

Behind the first, Makarov could see two more suited figures advancing. One shunted before him a boy; Makarov recognised him as the officer-cadet. Behind them, near the entrance to the corridor, was a second uniformed shape, limp and dead. It was the captain. He must have taken a bullet from the commissar.

In a few seconds the leading intruder reached the doorway to the bay. Pausing briefly to arrest the motion of Overchuk, now dead, she activated the door mechanism. It slid open just as the others arrived with the cadet. The teenager managed a brief, fearful glance at Makarov, before being pushed through into the hibernation bay. He was followed by the leading figure. More gunfire followed.

One of the remaining figures raised his weapon. 'DON'T MOVE!' he shouted past the mask. The other took from over his shoulder a red metal tube, aligned it with an edge of the bay door, then began hurriedly pumping a ratchet. The device telescoped outward until it spanned the entire gap. With a lever-pull it was locked in place. Makarov saw that the door at the entrance to the corridor had been likewise braced.

'It's this one! It's this one!' came the cry of the cadet from inside the bay. There was a call, and the figure who had been winding disappeared into the bay, pulling

## *14 Departure*

something from his suit. Several seconds later there was a loud bang. This was followed by a rasping, metallic scraping sound.

Makarov had barely had time to formulate an idea of what might be going on when the leader appeared at the doorway, gesturing to the last remaining suit. He nodded several times. Then, holding his weapon with one hand, he fished a cylindrical canister from his belt, pulling the pin with his thumb. A harsh hissing sound filled the air, and followed the canister as it was sent in a lazy spiral down the corridor. An identical device was tossed into the hibernation bay.

Almost immediately, Makarov felt his nose and throat begin to claw. Mere seconds later his eyes were streaming, as he held back a coughing fit. He realised his guard had disappeared, apparently to help the others.

The pain inside his lungs became worse, and he started to wretch, desperately pressing the material of his shirt against his face. But it was to no avail. Through tear-filled eyes he saw the retreating shapes of the three invaders, ferrying between them a long dark shape.

The shirt came away as his limbs went limp. Unable now to stop himself, he floated free, his internals on fire. Every second his vision darkened, becoming more compressed. Then, finally, he was gone.

## 15 The Rangappa State

[They already know about Rusalka. They have to make a call. It is not from the President's perspective.]

*Five days earlier.*

'So what's this all about?' President Santoso asked, seating himself at a corner.

Director Adams stood from his chair, reaching over and activating the wall displays. The lights began to dim.

'The situation regards a certain technology intelligence operation in our catalogue,' he began.

The last of Santoso's aids made themselves seated, silence falling.

'Six months ago, you may recall, one of our assets on Mars was discovered by the KGB. I informed you here of the Soviets' offer to allow her extraction to go ahead unmolested, provided we share our Ethiopia nuclear seismology data with them.'

'Yes, I remember.' Santoso took a sip of his water. 'Deal's a deal. I'll always give Khrushcheva that.'

'Well, it appears that the asset in question, Ms Vogel, has now decided not to make the transfer.'

'Alright.'

Santoso waited, not yet sure what concern this was of his.

'This was surprising, given our pre-mission psychological analysis,' Adams proceeded. 'For this reason, we re-analysed the memory lock data obtained from her on Mars. The search didn't find anything that explained her behaviour. However, it did recover this:'

Adams retrieved the remote and a moment later the POTUS crests around the room vanished. In their place was a repeating grid of the same white and black image. Santoso leant forward, examining the one nearest him. It was clearly a diagram of some kind, depicting something that looked a lot like a fire extinguisher.

There was an odd kind of selective blurriness, as if certain parts of the photo had been corrupted.

Santoso recalled what he had been told six months before. This was a feature of the memory consolidation procedure, which was not designed to extract information, but to lock it in place for later recovery.

Adams pressed the key again and the first image was joined by a second, clearer figure. A moment's inspection revealed it to be the same diagram.

'The second image was recovered from the Soviet experimental weapons division in 2093,' Adams explained. 'What it shows is the latest known iteration of their Rusalka test device program.'

'Rusalka?'

Adams nodded to one of the new faces sat at the table. 'I suspected you wouldn't have received a brief on this. Hence my inviting Dr. Eldritch to sit with us today. Doctor, please could you provide a direct explanation of the program.'

The man Adams had indicated bowed his head, revealing a thinly stranded comb-over. He looked as if he had dressed for a funeral.

'Certainly, Director.' Clambering to his feet, he positioned himself at the end of the table, marker in hand. 'Mr President, you are familiar with the workings of ordinary relativistic explosives?'

'I'm no physicist.'

'Very well. I shall try. The principle is quite simple.' He removed the lid of the marker. 'The process begins with the pusher creating a microscopic singularity at the centre of the device.' He marked a red dot in the middle of the nearest diagram. 'This singularity has roughly the mass of a pineapple.'

'By singularity do you mean the black hole?'

'Yes, that's correct, Mr President. And like astronomical black holes, the singularity emits what is called *Hawking radiation*. The smaller any black hole, the greater the rate at which it emits this radiation. Given that the black hole we are talking about here is not much larger than a proton, it emits all of its energy extremely quickly. In less than a millionth of a second, it has converted all of its mass into energy via radiation. This is what produces the extremely powerful explosion.'

Santoso nodded, trying to emit comprehension.

'Now, ordinarily, the energy is transmitted equally in all directions. However, in the middle of this—sorry: last—century, Sunni Rangappa showed that there

exists a stable solution for the matter collapsing towards the black hole in which more energy is emitted in one direction than another during the evaporation. This effectively turns the singularity into a rocket. I will of course not perform the calculation here, but by this means the singularity is able to reach speeds of ninety-one per cent of the speed of light. Rusalka was set up by the Soviets to build a device that could realise this process.'

Eldritch paused, awaiting questions. Santoso pulled himself forward in his chair slightly, feeling that he was missing something. 'You said that this is under their EWD. So it has potential as a weapon?'

'Oh.' The physicist seemed momentarily embarrassed, though for whom Santoso could not exactly tell. 'Yes, certainly,' he said, turning to the screen, erasing a patch. In its place drew a horizontal line with a square underneath, shading the area between. 'Take our buried lunar shipyards, for example. At such a speed, a singularity of this kind created in orbit could traverse the distance to the surface in less than a millisecond.' He traced a series of dashes down to the horizontal line, then past it towards the rectangle. 'Then, reaching the ground, it would pass through it as if it were not even there—a singularity this size cannot effectively interact with matter. Finally, as it reached peak evaporation, it would release all the energy of a conventional relativistic explosive inside the cavity, destroying it.' He scribbled inside the rectangle. 'The same goes for our geostationary fleets and seabed missile silos. Any kind of conventional defence against such a system would be impossible.'

Santoso drew a long breath, allowing himself a moment to absorb what he had just heard. He made sure his voice remained perfectly level. 'I take it from the fact that I am only just hearing about this that they *didn't* get this thing to work.'

Eldritch nodded deeply. 'That's correct, Mr President. The computational resources required to find the device parameter settings that would lead to a Rangappa state proved intractable. The Soviets closed the Rusalka program in 2090. Two years later, we did the same to our own equivalent project, for the same reason.'

'Right.' Santoso looked between the faces of the assembled generals, scientists, and intelligence officials. 'So what's the big deal?'

Eldritch cleared his throat carefully, lighting a cigarette. 'It would appear that they have made a theoretical breakthrough.'

The atmosphere seemed to double in mass, the air pressing in around them. 'A

theoretical breakthrough?' Santoso asked.

Eldritch returned ruefully to the pair of diagrams. 'This document, the one recently recovered from the Martian SSR, shows the start of a calculation using a novel method of analytic renormalisation. We have verified it, and it appears capable of cutting the parameter settings down to a single value. Consequently, they now have the capacity to build Rangappa devices.'

'Wait a minute,' the president said incredulously. 'You're telling me that they went from nothing to solving this thing in the course of a single document? Just like that?' He snapped his fingers.

'Such things can happen in theoretical areas such as these,' Eldritch replied. His tone was strangely serene, as if this were all just the way of the universe.

Santoso pushed back in his chair, staring momentarily at the tiled ceiling. He drew a deep breath. 'I mean, how bad is this?' he asked. 'It isn't as if Khrushcheva is about to order a first strike against us with these things.'

'It's true that offensive action against us is currently unlikely,' said the Chief of Staff.

'But,' interjected the Secretary of State, 'we have to consider who succeeds her at the party congress in August. The next Gen Sec could be much more willing to push us with this.'

Santoso nodded slowly.

'Dr Eldritch, do you think we'll be able to reachieve strategic parity by then?'

'I'm sorry, Mr President,' the physicist stuttered. 'Achieve—?'

'Can the national labs have our own version of this design ready for deployment by December?'

Eldritch shifted uncomfortably where he stood. 'Well, to be frank, Mr President, just from the information we have, we possess little theoretical insight into the nature of this advance they've made. We can begin work immediately, of course. But without further... uh... *input* from the Russian side, we would be looking at a very extensive theoretical program to recreate what they've done.'

'Adams, can you get them any help?'

The CIA director pursed his lips, leaning forward. 'Penetrating their experimental weapons program will take five months at least. We have no fresh agents inside of that particular fence. Then we'd have to add time for development and integration.'

The room again fell silent. Santoso looked over the diagram on the walls, its

vital information obscured by the partial retrieval process.

‘What about this Vogel? Is she totally lost to us?’

Adams drew a long breath, organising his notes, as if he had been awaiting this question. ‘She’s got herself into hibernation; cohort scheduled for reawakening at Nebo military station. Extracting her before she reaches there would be imperative. But with the one agent we currently have aboard the station, that would be very difficult.’

Santoso waited for him to go on.

‘However, with the appropriate clearance, I could authorise additional operatives to join to facilitate an evacuation operation.’

‘How would they get aboard?’

‘We planned for them to ingress using the Ecuadorian shuttle that Ms Vogel was originally supposed to leave on.’

Santoso took a long breath, gritting his teeth. ‘This could be done quietly? The last thing we need at a moment like this is an international incident.’

‘The Soviets are already expecting her to be extracted,’ Adams said. ‘So far as we can tell, they don’t know that she’s tried to back out yet.’

Santoso leant back in his chair, again looking at the diagram. ‘Well, they clearly also don’t know that she’s carrying this. Else, they’d have smothered this whole thing in the cradle. We need to make sure we keep it that way.’

Nods issued from around the long room. Santoso reflected on the decision before him.

‘Tell your South American station to start preparations,’ he eventually said. ‘But make sure they hold off the trigger. I’ll let you know my final decision by two o’clock. If it’s a yes, you have clearance to act immediately.’

## 16 Awakening

[Makarov remembers the attack. He realised it was the Americans. They had poisoned her. They had come for her. What would they do after they had her information, now that she had betrayed them? They would torture her. They would kill her.]

Makarov had not known he knew what brains smelled like...

At first, the pain was little more than an indistinct screen, a stabbing, white-hot blanket. Through it could be discerned no thoughts, or particular sensations, only the vague shapes of ideas. But soon enough it started to thin, to divide itself, and up like rocks through a sinking tide came the stinging in Makarov's eyes and throat, the throbbing in his side, and the piercing ringing inside his skull.

As consciousness returned, he stirred, blindly searching around him for a handhold. He could not open his eyes. The air was bitter. How long had he been out? He could only find the answer by opening his eyes, but the residue still clinging to his lids currently made this impossible. He wetted a finger, recoiling at the taste, and cleared them the best he could, until they could be pried open. About forty minutes, he managed to glimpse on his watch. It felt like far longer.

A second, more prolonged glimpse about him informed that the air current had carried him into the hibernation bay. About him in the gloom hovered fragments of smashed surfaces, shards of metal and fabric. He tried not to breathe them in.

Nearby, he saw, were two large dark shapes. It took him a moment to realise what they were. Then he scrambled away, shouting out instinctively. It was Overchuk and the captain, their bodies touching, rotating slowly in the current.

Makarov took a moment to collect himself.

Then, still half-dazed, he began to move along the bay toward the light of the corridor. As he went, the dusty, bitter smell filling the air was increasingly joined by a metallic burning stench. Only when he was right before the still-smoking hibernation cage door did the memories suddenly return to him: the bang, the

black shape being carried away down the corridor. In horror, he looked past the grating to see only a single bag inside. Where Vogel had been now only bobbed the free ends of several feeding pipes, releasing their serum slowly into the air.

His stomach seemed to turn itself inside out. Then he vomited, gripping the handhold tight.

A voice spoke from behind him. In a flash Makarov had turned, hands raised to defend himself. But it was only the young deck cadet, hovering in the doorway to the bay.

'They took her, Comrade,' he repeated.

'Yes,' Makarov replied, swallowing a second round of fetch. 'They did.'

His mind was already reconstructing the situation. He could not understand why the Americans would have gone to such lengths to recover her.

'When I woke up, I tried to get help,' the cadet whined. 'But the way out of the corridor is clamped shut. I couldn't get through.' His eyes fell on the two bodies at the end of the room, and his voice cracked. 'They made me show them the pod, Comrade. They made me. I couldn't stop them.'

Makarov forced himself to take control, grasping the young man by the shoulder. 'I know,' he said, as reassuringly as he could manage. 'You did all that you could.'

The cadet nodded, face still contorted. 'Who were those people?' he asked.

'I don't know,' Makarov lied. 'But what matters right now is that we make sure everyone in here is alright, and that none of the life-support equipment was damaged in the fighting.'

'Yes, Comrade. Of course.'

'Do you know how to read these pod displays?'

The cadet nodded, seeming to rally himself. 'Yes. I can check them for you, sir.'

'Alright, good. You make a start on that.'

The cadet went to work. Makarov lingered a moment longer, staring into the open pod. What had they done? Then, searching in the lockers, he found two unused hibernation bags and made his way back towards the bodies. The air around them was thick with the smell of iron, and it was an effort for him not to gag. Carefully, he rolled the bag down over the captain and zipped it closed. Commissar Overchuk was a more difficult task. As Makarov struggled with the larger man, a bulbous red globule released itself from the clothing around one of his wounds, splashing against his wrist.

An instant later, an unmistakable cold pressure appeared against the back of his neck.

'Sir!' the cadet called out. He was hovering beside the cage with the prisoners. 'This one says its waking cycle has been initiated!'

*'Be still, Comrade,'* said a quiet voice into Makarov's ear.

Perplexed, the cadet began to approach the dark end of the bay. 'Comrade?' he repeated. Then he stopped, and his face turned to terror. The coldness vanished and a pistol appeared beside Makarov's head, pointed at the cadet. The hand holding trembled visibly.

'Over there,' the voice commanded, flicking the barrel. The cadet obeyed without hesitating, settling his back against the nearest wall. Makarov was directed to the same spot. Turning, he got his first look at his assailant.

He was an aged man with a grey ponytail. Round, dark-rimmed glasses ringed his eyes, reflecting the light of the corridor. As the glow played off fallow, angular features, Makarov was stunned to find recognition stirring within him. Was that even possible? Then he recalled the limp that prisoner had had.

Their captor moved to the door to the bay, gun levelled, and pulled the manual lock. The door hissed shut. Then he returned, searching them with his free hand. Makarov eyed the pistol, and realised it was Overchuk's. Would it work without his fingerprint? But then he recalled that the commissar had already armed it.

Apparently satisfied, the old man moved to the cage containing his comrades, glancing momentarily at the readout.

'What are your names?' he asked.

'Sto- Stolarski,' replied the cadet.

'Makarov.'

'Well, Comrade Makarov, Comrade Stolarski,' he began levelly. 'I'm sorry that we have to meet under these circumstances. Know it's not how I would usually choose to introduce myself. But, unfortunately, the reality of the situation has left me with little choice.'

Makarov looked past him, to the blown-open pod, where still sat that faceless black bag. He must have awoken when Vogel was removed, extracted himself, then stuffed the bag with something to maintain appearances.

'What are you going to do with us?' asked the cadet.

The man drew a breath. 'That will depend upon you and your comrades' ability to follow instructions. My sincere hope is that we can all leave this encounter alive.'

But if you make it necessary for me to shoot you, I will not hesitate to do so. Is that adequately clear?’

The cadet nodded emphatically.

‘And you, Comrade Makarov? Is that clear?’

‘I understand.’

Their captor eyed him for a moment, then turned. ‘Comrade Stolarski. I believe you were in the process of checking the states of the passengers. Please, continue this task.’

Stolarski hesitated a moment, then went to carry out the instruction. Makarov stayed where he was, one hand holding onto the wall. With the other, he began slowly searching the surface behind him, hoping it might fall upon some potential weapon.

‘I wouldn’t do that, if I were you,’ the man said.

‘How long until they join us?’ Makarov asked, nodding to the cage.

‘Thirty-one minutes.’

‘You could kill them, you know. Waking them up that fast. They might not be as lucky with nitrogen bubbles as you evidently were.’

‘They have survived worse, Comrade.’

Makarov allowed a moment of silence to pass. ‘And what happens then? In thirty-one minutes.’

‘We will get to see if your crewmates are willing to listen to reason.’

Makarov continued to subtly eye the space around him. ‘So, what?’ he persisted. ‘You plan on making some kind of deal? We live, and in return the KGB allows you and the others freedom?’

The man said nothing. In the corner of his eye, Makarov saw the cadet glancing nervously at him. Unperturbed, he continued.

‘Well, you’re wasting your time. The world hasn’t forgotten about you, or what you did. There isn’t a single chance in hell of you ever being allowed off this station. The KGB would sooner have you kill everyone aboard than let you go.’ Makarov again spied the cadet, now completely stopped. ‘So you might as well give up. The only thing you’re going to achieve is spilling more blood today than has already been pointlessly lost.’

Sokolov did not move. ‘Comrade Stolarski,’ he called. ‘I believe you still have work to complete.’

The cadet jumped, then scrambled to continue his checks. Sokolov continued to eye Makarov the same way he had before.

'You know me then, Comrade,' he began thoughtfully. 'There are some things which I have done for which I deserve, I suppose, to be known. He turned. 'In these bags, however, you will find two men that you do not know. Men who for four years have suffered for crimes I ordered them to commit. Crimes in which they had no say, and no chance to refuse. Every day that they are kept from their wives, their children, is an extra crime I have committed, one that cannot be allowed to go on.'

Silence fell again. Off in the dimness, the cadet still quietly worked away at his panels. 'So,' reasserted Sokolov. 'We shall wait here a little while longer. Then, should the word of Lenin prove wise, we will see what justice we can achieve together today.'

Makarov watched, dead still, as Sokolov returned to his panel. Carefully, he recommenced his search for armament. What could he use? A loose storage tray, perhaps; no doubt he could throw that pretty hard. But if he missed, he would be dead. Better to have something he could hold on to, something with a swing to it. If he could just—

'Comrades,' rang the voice of the cadet uncertainly from across the bay, clattering into Makarov's thoughts. 'There's... um... something here. I think perhaps you should see it.' Sokolov scanned the cadet and the area about him suspiciously. Then, gesturing Makarov to follow, he set off.

Stolarski was hovering apprehensively before a small stack of lockers, next to which was the remains of a security camera, its glass dome smashed by a hail of bullets. Most of the bullet holes were tightly focussed, but some had reached the lockers, leaving their metal doors punched and buckled. One, that which the cadet was indicating, hung partly open.

'I was just finishing with this row and I looked in and saw it,' he said.

Sokolov moved closer, rotating himself to see into the locker. Makarov did the same, squinting into the darkness. Then he saw it: a cylinder, about the size of a fire-extinguisher, wedged diagonally across the locker. As his eyes adjusted, he saw it was wrapped in white plastic tape, and bundles of wires snaked from one end, along the surface, to a cigar-sized metal object attached to the side. The cadet extended a hand towards it.

*'Don't touch it!'*

The sudden exclamation took Makarov by surprise, even as he worked out the nature of the device.

'Get back. Both of you.'

They obeyed. 'What is it?' asked Stolarski.

Sokolov said nothing, his eyes locked on the device. Slowly, he moved himself about, gazing at different angles into the locker. 'Get me a torch,' he ordered. The cadet nodded and disappeared across the bay, shortly returning with one. Sokolov took it and shone it in, tucking the pistol into the side of his jumpsuit. Makarov eyed the weapon, but held back.

'It's as I thought,' muttered Sokolov. 'A63 Portable. High-energy.'

'What's that?' whimpered the cadet.

'It's a bomb,' said Makarov.

A chill descended.

'A bomb?' repeated the cadet in disbelief. 'W-What if it goes off? Shouldn't we get to a safe distance?'

'It won't go off,' muttered Sokolov, recommencing his investigation. 'Not yet, anyway.' After a few more seconds of scrutiny he switched off the torch and turned around, eyes scanning the hibernation bay. A moment passed before he spoke. 'How many people are in here?' he asked.

'I think about forty,' replied Makarov, looking about.

'Children?'

'What?' asked the cadet.

'Are there any children?'

They looked at the cadet. 'Yes. Um, twelve, I think,' he replied. Sokolov paused, then spun back to the bomb, mouthing calculations to himself. He seemed to come to a conclusion.

Letting out a long, defeated breath, he looked grievously at the pod containing the other prisoners.

'Both of you, listen carefully,' he said matter-of-factly. 'This is the situation. That small metal cylinder is an M6 acid pen detonator, with a ninety minute fuse. Once activated, it cannot be made safe without special tools. Nor can it be moved: the mechanism is highly sensitive to acceleration; more so the closer to detonation it gets. Given when it was planted, we probably only have about thirty minutes. But it may be less; these mechanisms are built for concealment, not reliability.'

'What would happen if it detonated?' asked Stolarski.

'It's hard to tell,' replied Makarov. 'It would certainly knock out most of the crew module.'

Sokolov nodded in grim agreement. 'We need to move everyone out of here. Comrade Stolarski, help your crewmates to unblock the corridor. When they're through, explain the situation and get them here as quickly as you can. Is that understood?'

Stolarski nodded.

'Alright. Do either of you have any chewing gum on you?'

Neither did.

'Make sure you bring some with you,' ordered Sokolov. He paused, thinking. Then, apparently satisfied he had forgotten nothing, he pulled the pistol from his waist-band, flipped the safety lock, and held it out to the cadet. 'You will need this too, I suppose.' The latter took it, then looked from Sokolov, to Makarov, to the gun.

'Go on then!' snapped Sokolov. 'Don't waste time!'

'Yes, si— Yes.'

The cadet turned and propelled himself to the door as fast as he could. Sokolov rotated himself back around. Makarov noted the perspiration which had started to show on him, matching his own.

'Let's start getting these cages open, Comrade Makarov.'

## 17 Disarming

'You love her?'

'I should not.'

'Why would she be taken?'

'She was a physicist. She fell ill suddenly a few days ago. She's gone now.'

'We must get her back. What they took must be important.'

Makarov agreed.

'They're still here. They will kill her.'

'They will?'

'In a situation like this, it is certain.'

Makarov could not bare the thought of it, even though he knew that she would be captured.

Sokolov looked at him. Suddenly, it all made sense.

'We must get her back. What they took must be important.'

Makarov agreed. But it would mean recapturing her. But maybe that was all okay now. She had been taken by force.

'What will happen if they take her?'

'Take her? They will kill her.'

If they saved her, he could stop the investigation. Somehow, he would do it.

It was almost ten minutes before the cadet returned, bringing with him a crowd of anxious-looking crew. The group stopped at the door to the bay, craning their necks to peer inside. Several of the foremost wielded shotguns: relics taken from the station armoury.

Through this mass of bodies shortly appeared Lieutenant Frunze, stopping himself beside the cadet. He squinted in, eyes falling briefly on the two black bags of Overchuk and the captain. Then he called out. 'Comrade Makarov?'

Makarov responded flatly, struggling with one of the cage doors. Frunze cast his gaze about, then caught sight of him. 'Could you come out here a moment?'

Makarov abandoned the task and propelled himself the half-length of the bay to the door. Behind him, Sokolov continued work on the lock.

'Yes, Lieutenant?' he asked, arriving.

Frunze drew the two of them to the edge of the door. 'Is it really true that there's a bomb in there?' he asked in a low voice. His face was anxious, though clearly some vain attempt was being made to hide it.

'Yes, it's true.' Makarov recounted the situation.

Frunze swallowed. 'What about the convict?' he asked. 'Stolarski says you know him.'

'Know him?' replied Makarov, glancing at the cadet. 'The man in there is Alexi Sokolov.'

It took a moment for the words to process inside the head of the Lieutenant. Then his eyes went wide, and he turned them again into the bay, fixing on the dark figure there. 'The Butcher of Belyy Gorod? That's not possible,' he breathed. 'He's supposed to be dead.'

'Yeah, well he's not,' replied Makarov, fast losing patience. Frunze stared on for several seconds. 'Lieutenant,' Makarov hissed. 'We're wasting time here. You've heard the situation; we've only got fifteen minutes to evacuate this whole part of the station.'

Frunze looked at him, then at the lines of pods. 'Fifteen minutes? For all of them?'

'Yes,' said Makarov. 'And every second we wait, the acid pen detonator on the bomb gets more unstable.'

Frunze held out a moment longer, looking at the faces turned toward him, then relented. On his shouted orders, the crew spilled into the room, immediately beginning work removing the hibernators from their open pods. Only the two who were armed did not, instead taking Sokolov and directing him against a wall. He offered no resistance.

Makarov wasted no time in joining the frenzy of action. The main task of each pod was to disengage the sedation units from their mountings. It was difficult work. When a unit was freed, it and its two hibernating passengers were removed from their cage, bound together with cord, then rushed to the corridor.

Makarov focused on the work as a way to avoid thinking about Vogel. He knew

that he was never going to see her again. His life stretched ahead of him like a black void. Not that he was likely to live a particularly long time after today.

On the crew toiled, blistering their fingers and grazing their knuckles on the unsanded metal of the cages, their deadline rushing towards them.

Nine minutes, six, three. Their remaining time ticked away on twenty diagnostic panels in unison. Soon enough it was gone. Makarov saw Frunze looking between his watch and the five still-full cages, the white shade of his face visible through the dark. Sokolov, who had been allowed to help with a nearby pod, muttered something out to him, and weak resignation showed in the lieutenant's outline. They were out of margin.

'Time is up!' he bellowed. 'Everybody out!'

The order was barely heeded, the crew continuing their frantic working. Only when Frunze shouted harder did people begin to scramble for the door. Makarov went too, cursing every word he knew as he passed the still-full cages. It would take too long to empty them.

As he reached the doorway, he came upon Frunze and Sokolov, talking intensely. A third man, one of the armed astronauts, was hovering uncertainly nearby.

'What are you saying?' asked Frunze. 'That you want to try to defuse it?'

'No,' replied Sokolov calmly. 'Defusal is not possible with the tools we have. What I am proposing is to put it into a safe state, which may allow me to eject it from the station.'

'You know how to do that?'

'Yes.'

Frunze ran a hand through his short-cropped hair, then noticed Makarov. 'What if you're wrong? What if you set it off? You'll kill everyone in here, along with yourself.'

'If nothing is tried, they will be killed anyway, quite possibly along with everyone else on the station.'

Frunze hesitated a moment longer. 'What about your condition?' he asked, indicating Sokolov's quivering fingers. 'You expect me to believe you can disarm a bomb straight out of dehibernation?'

Before a reply could come, Makarov intervened. 'I'll do it,' he said, holding up his hands. 'I can do the fine work, if he directs me.'

Both men regarded him. 'Sir?' the astronaut pressed from the doorway. 'We only have a few minutes.' The lieutenant looked around, swore under his breath,

then turned back.

‘Alright, on your own heads be it.’

He handed Makarov the pistol he had been brandishing, eyes flicking toward Sokolov. Then he and the guard set off down the corridor.

The two remaining men regarded each other for a moment. Then they turned and re-entered the quiet of the bay.

The locker was just as it had been left: door still ajar, with the device wedged from corner to corner. They took up positions on either side, Sokolov securing to the wall a tool bag he had requisitioned during the final evacuation. He proceeded to make one last examination of the cavity with the torch, then produced several silver rectangles from his top pocket.

‘Do you like watermelon?’ he asked, handing them to Makarov. ‘We’ll need at least two sticks’ worth.’

Makarov unwrapped the gum, a vague picture of the strategy starting to form in his mind. He chewed mechanically, hoping the action would stop him thinking too deeply about what he had just agreed to do.

‘Alright, Comrade,’ said Sokolov. ‘Remember, there is nothing to fear here.’ He took a flat-head screwdriver from the bag, and with its tip indicated the cylindrical detonator taped along the explosive body. ‘This should be the end we need to open,’ he said, pointing to one circular face. ‘With that removed, we can access the spring striker mechanism.’

Makarov nodded, taking the screwdriver. ‘Expose the mechanism. Right.’

‘You see along there,’ continued Sokolov, directing the torch’s beam. ‘There’s a lip on the far rim. If you can put some negative pressure on that, it ought to come out. But you need to make sure you press entirely along the axis. Any lateral movement could disturb the holding wire inside.’

Makarov nodded again. After a moment he looked at Sokolov, expecting more instruction. But he was silent. Apparently there was nothing more to be said. Action was all that was needed now.

He took a deep breath. Then, tightening his grip on the screwdriver, moved in, bracing himself against the edge of the locker. Air flowed past the open entrance toward the nearby ventilator, washing over his neck and face. His heart was reverberating inside his ribcage; an unpleasant reminder of his mortality, if such a thing were needed. For a moment the blade of the screwdriver shone motionless in the

torchlight. Then he progressed it forward along the detonator until, very gently, it made contact with the projecting edge of the cap. Instantly, his arm became white hot, buzzing with energy.

It was not an arm, he tried to tell himself. It was simply a tool, an implement, which could not choose to fail him. With breath held, he began to push. His first gentle press achieved nothing; the cap remaining securely in place. The second was the same. With fear and the threat of cramp growing, he tried a third time. This time he pushed hard, and as his arm climbed the force gradient, he felt the cap begin to budge. Raw energy immediately ignited within him, as then—

‘SHIT!’

The screwdriver slipped from its narrow purchase and, propelled by the residual force in his arm, soared toward the surface of the bomb. Only by a gut-wrenching millisecond contortion was he able to avoid the collision. In a second he had withdrawn himself from the locker, his entire body shaking. ‘You fucking bastard!’ he cursed into it. ‘Fuck. Fuck.’

Sokolov grasped him by the shoulder. ‘Take some air, Comrade,’ he said, a concerned look on his features. ‘Then we will be able to try again. I believe you almost had it.’

Makarov grunted. He glanced at the clock, and at the ever-narrowing period remaining until their forecast oblivion. For a moment he considered asking Sokolov to take over, but that was illogical. After several more seconds of controlled exhalation, he finally felt ready, and readopted his position.

‘Nothing to fear here,’ he repeated under his breath, as he inserted his arm into the locker.

Holding the screwdriver more lightly than before, he lined himself up, moving the edge forward along the detonator, until it caught. Not too much pressure. For perhaps half a minute he was there, barely pushing, probing. Every time he felt movement, he let up, stopping himself from overshooting again. Progress was slow, but steady. Then, finally, the cap popped from its mounting ring, and spun away into the darkness.

‘Well handled, Comrade,’ muttered Sokolov, as Makarov extracted himself. Taking his place, he shone the light into the exposed end of the detonator. ‘You see that notch?’ he asked. ‘The one in the rim running around the spring?’

‘Yes, I see it,’ replied Makarov, still breathing heavily.

‘That’s the entry point to the striker assembly. If the mechanism immediately

behind there can be jammed in place, it may become insensitive enough to move.'

'The gum, then?'

'That's right,' Sokolov nodded.

Makarov reached up and took the amorphous ball from within his cheek, where he had stored it. Following Sokolov's instructions, he rolled it into a narrow stem, and then, holding it between a pair of tweezer-tips from the bag, leant once again into the locker. This time, he had to insert himself even further to get the required angle, his head resting a mere fist-width from the silver detonator. If he stilled his breathing, he was sure he could hear the fizz from inside as the acid ate away the last shreds of the retainer wire. There were only a few minutes left, he knew.

With arm steadied against the locker wall, he carefully began to feed the gum into the exposed notch, pushing it through with the tweezers, until about two-thirds was inside.

'Alright, good,' said Sokolov. 'Now you just need to get it bound with the mechanism.'

As directed, Makarov cleaned the ends of the tweezers with his increasingly sodden t-shirt. He knew that this would be the most delicate part of the whole procedure. Then, head thumping, he lowered the tweezer ends into the detonator, advancing it until he was able to grip the projecting rod of the spring mechanism. Feeling it in place, he began to rotate the handle, using the fingers of both hands.

Degree by degree, the mechanism turned about itself, dragging the gum with it. Resistance to the rotation quickly grew, reaching the point where it was hard to stop the tool from slipping from his damp fingers. But Sokolov pushed him on, saying that every degree further brought them closer to safety.

'Alright, that should be enough,' the older man finally said. Makarov retreated from the locker, and both men took a moment to breathe, preparing. The fine manipulations were over. Now it was time for the true test: the extraction. Makarov wondered whether there was anything more which could be done, any extra measures which could first be put in place. But a glance at the clocks told him it was now or never. 'I suppose I should thank you for trying this,' he said.

'Did you see another alternative?' replied Sokolov.

Together they eyed the device. It was wedged in hard - that much could be told just from looking. Some level of shock in getting it out would be unavoidable. How much could their makeshift buffer handle? There was no time to attempt such calculations. Together they reached in, each grasping an end of the bomb

with one hand, supporting themselves with the other. 'Nice and steady,' breathed Sokolov. 'Try and watch where it's going to go.'

As Makarov tightened his grip, he started to see things from his past: his father, sat at his armchair; the view from his classroom window; the inside of his academy lecture hall; the view from the observation ring as he and Vogel had stargazer.

'Three, two, one,' counted Sokolov, and together they pulled.

As they had discussed, Makarov tugged harder, causing his end to pivot outwards. Sokolov held on, keeping the body's centre of mass stationary in the centre of the locker. But at least one of them had misjudged, for as the device turned, its edge knocked hard against the rim of the locker. For a moment Makarov thought it was all over. But the continued thumping inside his skull told him he was still alive. The device had held, and was now in the open of the bay.

Sokolov caught it, arresting its motion.

'Let's go,' he said.

Makarov did not need the command repeated. The two raced for the door, then turned into the corridor, Sokolov making sure to guide the bomb in a smooth arc. With Makarov leading the way, they rushed outwards towards the dock's exterior surface, deathly quiet following them through the empty passages. A steady trail of red-braced doors and smashed security indicated the path the attack had taken.

Thanking Lenin that the way was clear, Makarov led them round the final bend, where they were confronted by Airlock 2. Passing care of the bomb to Makarov, Sokolov set about initiating the pressurisation sequence, consisting of a series of clunks, followed by a painfully long period of dull hissing. Then, finally, the indoor disengaged and was swung open, whereupon the two carefully placed the device motionless inside.

Counting the seconds, Makarov heaved closed the door and commenced depressurisation, monitoring the bomb through the small window. The inflowing air buffeted it slightly, setting it spinning, but did not move it from its central position. Then the whooshing ceased, and the out-door began heaving itself inwards. A crescent of stars appeared, widening to a circle. Out in the distance, the sun shone brightly off the station's long counterweight arms. Finally, Sokolov depressed a stick on the panel, and with a brief roar white jets filled the airlock. When the haze cleared, the bomb had vanished.

Straining, Makarov was just about able to make out a white shape, unmoving against the dark sky. It rose and fell in brightness as it spun end over end. For

several seconds they watched it, its brilliance rapidly diminishing. Then, like some half-remembered nightmare, it faded into the dark.

It was done. A great, smothering tiredness suddenly overcame Makarov, the sea of adrenaline which had supported him now draining away. His wet clothes clung plastic-like to his body, and the pain in his side and throat now made themselves known again.

But he was alive.

Before he even knew it, he had allowed his head to nod back, and his eyes to close, exhaustion finally overcoming him.

A minute later he awoke with an appalled start. Instinctively he reached for his pistol. Finding it was still there, he wheeled himself about, looking for Sokolov. To his relief, he was hovering unmoving by one of the windows.

The ex-colonel did not look as he approached, instead keeping his eyes fixed on the crescent face of Earth, beyond the glass. It occurred to Makarov that he likely would not have seen a window in all his years of imprisonment. The planet was now visibly receding by the second.

'Pleasant rest?' he asked, as Makarov stopped a few metres away. The latter eyed the nearby internal wire-phone, set into a recess in the wall.

'Have you said anything to the others?' he asked.

'No,' Sokolov replied pointedly. 'Not yet.'

Makarov acknowledged the implicit request. The least he could do was permit him a few more minutes of freedom.

Sokolov kept his gaze on the window, squinting against the brightness of the sunlit parts of the station.

After a seeming eternity, he spoke. 'The person they took,' he said slowly, his voice level. 'The physicist. She was more than a colleague to you.'

Makarov looked at him, saying nothing. He knew that his face was answer enough. Besides, it had not been a question.

'It is a terrible thing to have to watch man realise that part of himself is gone,' the older man continued, his mouth a thin line. 'Those first moments after you awoke... I have seen that face many times: an arm, a leg, a comrade. But only very occasionally are we confronted with bare, abyssal loss: the shattering of the world around us.'

Makarov held back for just a moment. 'Well, you've caused more of that than most people.'

'Yes.'

Sokolov was silent. 'How did you survive, Comrade Makarov? When that bomb took away your friends, your parents, your future, how did you not succumb to the pain?'

'Who says I didn't?'

For the first moment, Sokolov looked away from the window towards him. 'Because you are here. You have love in your heart towards another; a love I daresay you fought for, given her status. That is not the sign of a man who has given up.'

Makarov drew a measured breath. 'What choice have we but to go on?'

Sokolov turned his gaze back to the space outside. The glow of the reflected sunlight lit up his face, turning his thinning hair to a white halo. 'Unfortunately, Comrade Makarov, there is always a choice.' His expression was bleak. 'When I learnt of Polina's death, I knew the decision I faced. I had seen others face it enough times before me.'

'I could retreat to the past, to a world populated by ghosts. Perhaps, for a time, I could make the world stand still, a frozen image of a life that remained worth living. But sooner or later such an image will thaw. And ghosts make poor company for the living. Such a path invariably leads one out of an airlock.' Sokolov paused. 'Have you ever been spaced, Comrade Makarov?'

'No. Not properly.'

'It is not as bad as people imagine. Yes, there is pain. But there is also serenity. One does not realise the toil involved in drawing air in and out of our lungs every second of our lives until we are freed from it.' Silence fell. 'It would have been a kind fate to choose.'

'Then there was the other option. Forget the past; defeat it. Make no room for it. And so I did. I crushed it beneath the future. Whence I had only one purpose: the preservation of our state, the defence of Soviet Communism. Perhaps, if I had known then what that would entail, I would taken that walk instead.'

Makarov thought of Malofeyev, of the Mothersky plot, the insanity of it all. He could not help from asking incredulously: 'You really thought that blowing everything up would have saved the Union?'

The older man drew a quiet breath. 'It hardly matters now, does it? It's all too

late.' Makarov detected the faintest ghost of moisture in the eyes across from him. 'I sold my daughter's memory. Now when I close my eyes, I cannot even picture her face. And for what? I purchased devotion to a task I cannot complete; yet one that does not allow me to die. I shut my eyes and I see nothing. And I feel nothing, except for fear that all of it: Polina, Belyy Gorod, all the horror I authored, it was all for nothing.'

As Makarov watched him, he felt the darkness inside him begin to grow. He wanted to tell him that he was right, that it had been all for nothing. This world was a black, barren place. And now the one piece of light it had had was gone, taken by the same people who had already taken one everything else from him.

'What would you do to get her back?'

Makarov returned to life. The question had surprised him. 'Who?'

'This physicist.' Sokolov turned away from the window, the light etching a line down the side of his face. 'What would you give for that to have not been your last moment together?'

Makarov knew that the ex-colonel had some plan in mind to rescue her. Slowly, he parsed the question. He and Vogel were damned either way; he knew that. Once they were away, she would be interrogated, her remaining secrets extracted, then imprisoned forever for betraying her CIA masters—if they didn't murder her instead. As for him, he would face the same fate, but from inside a KGB cell. So would she, if her nation somehow managed to recapture her. Whatever either of them did, this was end.

The only question was how they spent these last moments. Would it be alone, disparing, afraid? Or would it be together, defying their fate for as long as they could?

Then he thought of the Americans. The mental image of the bomb pasted itself over his mind. He saw the sharp edges of the main body, the white of the tape, the smoothness of the detonator. Was that what the one on Orel Station had looked like: that had killed his friends, his comrades? Why had they done it? What was the point? There and then he decided: he would do anything in his power to stop them from getting away with this again.

'Anything,' he said. 'I'd give anything.'

Sokolov nodded. 'Then help me, Comrade. Help me atone for the one percent of my sins I can and stop this injustice against our nation from occurring today.'

It took only a few minutes from Makarov calling for the doors at the end of the corridor to open, dispensing a group of engineers, wielding weapons. Frunze propelled himself at the head of the procession. Stopping, he positioned himself a short distance from Sokolov, hand on the pistol at his hip.

'Alexi Sokolov,' he declared judicially. 'The people of the Soviet Union thank you for your assistance during this time of conflict. But I am now obliged to return you to your prescribed state.'

Sokolov did not move. 'I suppose it is pointless to ask about my two colleagues?'

'They have already been returned to hibernation, where you will soon be.'

The ex-colonel nodded, maintaining his position. 'Might I ask, Lieutenant: what do you plan to do subsequent to my recapture?'

Frunze looked about him, addressing the onlooking crew as much as his interlocutor. 'We have received orders to evacuate. The shuttle will carry all personnel to Earth. The navy will be taking over the situation.'

'And what of Comrade Vogel? By my observations, a ship is ingressing for close approach in four hours. That gives you three hours to perform a rescue operation.'

'We are currently unable to transmit communications. Thus, we have no orders regarding her specific situation.'

Sokolov paused momentarily. 'You are aware of who she is?'

Frunze hesitated. 'Comrade Makarov?' he asked, turning.

'She is a researcher for our secret weapons program,' Makarov replied. 'Therefore she most likely possesses information vital to the security of the USSR.'

'So these are terrorists, then?'

'Worse,' said Sokolov. 'CIA.'

'How can you know that?'

'The detonator on that bomb was of a military design. Specifically, that favoured by Western special forces. Comrade Makarov can confirm this.'

He did.

'And this.' Sokolov drew from a zip pocket of his jumpsuit one of the expended sedation gas canisters. Immediately, the familiar bitter smell started to fill the air. 'The emitter has had its markings removed, but I know it: the smell is Kanzine-C. The US Air Force dropped in during the Amazon war. "Non-lethal", they continue to call it. I personally know this to be untrue.'

Frunze shifted uncomfortably. 'Well, this doesn't change anything,' he said. 'I am cleared only to evacuate. Any additional action would require orders from

the Admiralty, which we cannot ask for.' In a moment, he seemed to remember himself. He adjusted his grip on the pistol. 'We don't have time for this. You two, grab him,' he said, pointing to a pair of astronauts.

Resentfully, they began to very slowly move in on the ex-colonel. 'And what will you say when you do eventually make your report, Lieutenant? That you knew of a plot to steal secrets from your government, and you did nothing to attempt to stop it? That you favoured waiting for orders over preventing crimes against the state?'

The pace of the two astronauts was by now a crawl. Frunze looked between the twenty faces turned towards him with an air of desperation.

'This is all just speculation,' he insisted. 'We don't know any of this.'

'Is that the case?' asked Sokolov. 'Or is it the case that there is an innocent woman being kidnapped, perhaps tortured, mere hundreds of metres from us? A woman who you alone have the power to save? You are the commander here; you get to decide which is to be our reality. You will be the hero or villain of the story of today.'

Frunze seemed to sag. The faces enclosed him, the expectant murmurs overpowering him. With a level of effort normally impossible in microgravity, he turned to Sokolov.

'Alright, well what do you suggest we do?'

## 18 Snowfall

When it came to modern travel writing, few could top the works of Eva Li. Not only did she possess a beautiful turn of phrase and vibrant description, but had also seemingly been everywhere it was possible for a person to go. From mountaineering expeditions in Alba Patera, to microlite rides above the Venusian clouds, to circling the immensity of Saturn's rings, to walking on Io, she had been there, done that. With this wealth of material she had written dozens of books and countless articles, each further cementing her position as the go-to adventure journalist of the twenty-first century.

Vogel wished she was reading one of those books now. Instead, she was remembering vividly the section of *Eternal Storm* that described Li's experience of coming out of hibernation when they reached Europa.

'The first sensation is most aptly compared with a bull stomping on your stomach,' went the passage. 'While at the same time, a nest of rats is sprinting around the inside of your head and a giant is trying to suck your insides out through a straw. It's like the worst hangover you've ever had, but which no Nervostin can fix. For it is no normal illness you are experiencing; it is your body punishing you for what you have done to it, for dangling it so close to the precipice of medical death.'

At the time, Vogel had been sceptical. But now she understood.

She had been awakened over the course of an hour, the absolute minimum recommended by the WHO. The first thing she recalled was a face, lurid with hallucinations. Yet, it was immediately familiar. '*Sergey!?*' she had guessed desperately. The noises that had returned to her through the mask of receding drugs told her little, except that things were not normal.

As she climbed from the hole, she began to notice more strange things, not a result of the serum. The figures around her were floating, rather than walking. Why was she being woken in Nebo-1's zero gravity section, rather than the medical bay? And the clothes of the person repeatedly looming over her: they were not those of a doctor.

A few minutes later, a realisation struck her that turned her already frigid limbs to ice. The voices occurring around her were not being wildly distorted, as she had thought. It was that they were speaking English. With a herculean effort, she turned her head against the stretcher brace she was on, gazing at the walls. She was still on *The Martyrs of Córdoba*.

'We're not yet sure how it was that Soviet intelligence discovered you,' Sánchez explained. 'My guess is that there was a leak. Or maybe some trace of your access was found at the last minute.' She put a hand on Vogel's arm. 'But the important thing is that you're safe now. We're going to get you out to US territory.'

'Okay, good,' Vogel said with forced gratitude, nursing the pouch of hot field tea she had been given. The shakes from the awakening process had still not fully receded.

'Our extraction ship will be arriving in five hours. We're gonna have to make an about five-hundred-kilometer hop in suits to get to it.' Sánchez paused. 'Before then, though, we need to get something from you, if that's okay.'

Vogel was hesitant. 'What is it?'

'Nothing big,' said Sánchez, producing a folded slip of paper. She flattened it, handing it over. 'We need to do a field retrieval to recover this.' Vogel peered at the document through her still-fuzzy vision. The diagram at the centre showed a fire-extinguisher-shaped object, which she immediately recognised as a KnK-6 relativistic charge. However, the rest of the document was unfamiliar to her. The border was occupied with a honeycomb of scribbled notes, much of which were too pixilated to be legible.

'I don't recognise this,' she said.

'That's okay. You won't know most of the items that got pulled in during the memory lock. We just need to jump in quickly and see if we can get this out.'

Vogel relented, as if she had a choice. 'Alright.'

'Great,' smiled Sánchez. She put out a comforting hand. 'Soon this will all be over, and you'll be able to start your new life as a US citizen.'

She said that she would go and prepare, propelling herself from the room. For the first time, Vogel was alone in the small, windowless space in which she had been dehydrated. She gasped, letting out a cry. The full weight of the situation began to crash into her. What had she done? She had seen blood on the exterior of Sánchez's spacesuit. Had they injured someone getting her out?

Then her thoughts turned gut-wrenchingly to Sergey. This was the exact opposite of what was right. He had risked his life for her, so that they could be together. He had even got the letter to Sánchez, it seemed. Yet, he was now the one going to be punished, while she got away scot-free. As soon as they found out that he had known about the operation, he would be doomed. How could she live with herself, knowing what she had done to him?

The only thought in her mind was to be with him, to face this together. But how? She was trapped. There was no way that she would be let go, not after all that she had now seen.

Trying to come up with an idea, she began searching the room. But it was bare, other than a blank notice board and few transparent filing cabinets. After searching through these, she had in her possession only a set of pencils and some tape. Testing the tips of the pencils, she found that they were quite sharp. It was not much of a weapon, and she did not intend to use it as one, but they might prove useful for some other purpose. Still, though, she had little to go on.

Her mind turned to the document. It was clearly important to the Americans. A vague idea entered her mind of bartering with them for it. But that might make them realise her treachery. Better to cooperate, for the time being.

A thought occurred to her. Holding up the print, she examined it again. This time, a strange feeling drifted over her mind. She was sure that she had not seen it before; yet an irrepressible sense of *déjà vu* emanated from those equations. Had she been at an internal conference where someone had been presenting something like this? Maybe that was it.

She was still considering when Sánchez returned, opening the heavy metal door. 'Okay Ms Vogel, we're ready to go. Would you follow me please.'

They propelled themselves along the narrow corridor outside. For the first time, Vogel could see roughly where they were. A line of tinted windows showed the sweeping expanse of the sunside of the habitation disk, positioning them at the secondary command bridge at its centre. They must have cut it off from the rest of the station.

A moment later they were in another room, this one darkened. Tape had been used to muffle the incandescent light strips. Two men were waiting inside, both in the same orange civilian spacesuits as Sánchez. 'Ms Vogel, these are operators Allen and Lovejoy,' she introduced them.

'Hello,' she said meekly.

'Call me Frog,' said Allen. 'I'll be taking you through retrieval today.' Vogel couldn't help but notice he sounded rather like Doctor McCoy from Star Trek.

'Okay,' she said.

The process was all too familiar. Lovejoy went to wait outside, while the other two strapped Vogel into a restrictive harness. A collection of machines were velcroed to the surface beside her, their shiny finishes contrasting starkly with the dusty metal of the room itself. Finally, the cap and goggles were placed over her head. For the second time that day, she was plunged into a dark world, consisting only of her internal monologue.

'You may notice some differences this time, Miss Vogel. That's because we're going for retrieval, rather than just consolidation. Cos of this the update frequency's gonna be a bit higher. But other than that, it should all be like you've had before.'

Vogel nodded as best she could.

'Soon as we're done here, we can get to splitting.'

'Splitting?' Vogel asked blindly.

'We can leave,' said Sánchez gently, placing a hand on her arm.

'Right, sorry.' There was a pause. 'Okay, I'm gonna beam the reference image into your goggles now. It's the same as you've seen before. Just try to focus on the overall structures; that will help the retrieval.' The darkness before Vogel was replaced with grey and white. It took a moment for her eyes to focus; the whole thing seemed enormously far away, like a great snowy plane viewed from space. Then she had it. The document stretched from one edge of her vision to another. Once again, she turned her gaze over it, squinting at the pictures, the areas of blurred-out text. That sense of recognition was growing by the second. What was this thing? Where had she seen it before? She knew that nothing like this would have been presented at any conference.

'Alright, Miss Vogel. We're gonna get started now.'

The document vanished, replaced by that familiar number thirty. As before, the numbers started to descend. Vogel again began to taste metal. What was it? Where had she seen it?

She was starting to feel insane.

23, 22, 21...

Reality was slipping away by the second. She knew that soon she would be gone. But then, like the first moments of a dream, there it was. It was clear. She

remembered everything. And instantly, she knew that she had made a terrible mistake.

↻

Shivering, she reached for her coat. Was something wrong with the office air conditioning? She glanced again at the picture of her and her father, sitting upon the edge of her desk.

The breeze returned, displacing a loose paper from the desk. She watched it zig-zag its way to the floor, landing with a soft skid.

'Can we shut the door yet, Dad?' she asked.

She stooped after the paper, placing it back upon the uneven wooden table.

Her father shook his head solemnly. 'I'm afraid I think that's as far as the door goes, my dear. But it's all part of the experience, isn't it? Here, let me move up; you can sit nearer the fire.'

'Thanks.' Vogel squeezed onto the end of the wooden bench. Immediately the warmth of the wood stove began soaking into her side, turning the last flecks of snow on her coat to water. She stretched out her hands.

'So, you were saying?' she prompted.

'Yes, right.' Her father cast his hands briefly over the six sheets of paper spread before them, as if trying to reabsorb their content. 'Where had I got to?'

'The end, more or less. Just the derivation of the cross-flux.'

'Ah yes, right.' A break in the cloudy Ural sky outside sent a brief shot of sunlight through the cabin, turning its insides orange, before disappearing. Her father moved one of the sheets into the centre of the table, completing the final parts of the proof with his pencil. A few numbers appeared beside the diagram, a short calculation, and a bold double underline.

'Okay, so here we are,' he finished. 'Now, look what the correction term's actually doing there. You see, once you've taken account of the spin tensor, then there's a whole extra factor of eight in there at the second-order denominator.' Placing his pen down, he looked expressively across at her. She gazed hard at the formulae on the page, feeling the stiffness in her neck and back.

It had been a long exposition, coming immediately after an even longer hike up through the snow to reach the cabin. But her father had not been willing to wait. The idea had apparently struck him soon after disembarking the rocket. Luckily, their hosts had stocked the place with paper.

She collected together the sheets and began rereading, their author sitting in patient silence beside her. Then she set them down again. 'Well, it seems to work. The renormalisation goes through, I think.' Her father seemed to visibly decompress beside her.

'So I didn't make any mistakes?'

'I can't see any.' Vogel hesitated before she said any more. 'I'm not sure I see the significance, though. Isn't this just a special case of Sopolski normalisation?'

'Of course it is. But look at the second-order terms. What do they make you think of?'

Vogel chewed on her lip. She could feel several dark premonitions in the back of her mind, but was unable to coax them to the surface. Her father looked on patiently, as if waiting for her to complete her maths homework. After several long moments, a thought came to her.

'I suppose they look like Rangappa factors,' she ventured.

'*Exactly.*' He seemed relieved. 'So it isn't just me then. Quite beautiful, aren't they?'

She looked at him questioningly. For an instant, his desire to let her work out the implication herself seemed to battle his own eagerness to explain. This time, the latter won out.

'You see, I'm wondering if something like this is what was missing from our anisotropic collapse program,' he said excitedly. 'Do you remember how the pruning algorithm always diverged at first turn? Well, if I'm right, this renormalisation would have allowed us to factor out the offending modes before even considering them.'

Vogel now realised what the dark premonition had been. She stared at the formula. Her mind could just about see how something like that might work. 'That would certainly be interesting,' she said guardedly. 'At least, from a physics perspective.'

'Oh I think it's much more than that. I'm intrigued to know what Bernecker will make of it.'

Her heart fell. 'You're planning on taking this to the Ministry?' she asked.

'Well, not this exactly,' her father demurred. 'I'll have to work out more of the details first. But of course; a result like this could be very important to future work.'

She hesitated, trying to choose her words carefully. 'But do you think sharing

this is a good idea?’

‘Why wouldn’t it be a good idea?’

‘Well,’ she emitted an exasperated breath. ‘—multiple reasons. Your health, for a start. You’re supposed to be resting.’

‘Oh,’ he waved the complaint away. ‘This wouldn’t require much work.’

She persisted. ‘And then there’s the project you’d be helping. Rusalka. You told me that you were glad when you were taken off it; that you didn’t want your efforts to go towards a first-strike device. Now you’re saying you want to be back on a program whose only goal was to create a weapon of aggression?’

Her father was silent, staring at the table.

‘This is my chance,’ he eventually said to the sheet of paper. ‘My chance to show them that they’re wrong; that I’m not losing my marbles.’

Vogel felt pain stab through her heart. ‘Dad, the only way you’re going to get any better is by taking this thing seriously.’

‘But this is a huge result, Nina,’ he insisted. ‘This could get me reinstated to my position. I wouldn’t need this damn medical leave any more.’

‘Dad,’ she said as gently as she could. ‘They’re not going to reinstate you. I think you know that.’

‘No!’ He whacked the table with his fist. Vogel jumped out of shock. She had never seen him hit anything before. She stood edgily, facing him. ‘They’re wrong.’

‘Okay,’ she said.

The sunlight was now streaming in low through the window, turning the cabin a deep yellow. She hesitated. ‘It’s nearly dark,’ she said. ‘I have to go and get us our water. Are you going to be alright for an hour here?’

‘I’ll be fine,’ he said, not looking at her.

It took longer to work out the electric sled than she had expected and even longer to separate the ice blocks from the central repository. By the time she returned, it was almost dark. The mauve sky had vanished, snow now coming down in thick sheets. The fluffy particles collected around the collar of her coat, stinging her neck with the cold.

After stuffing the ice into the external melter, she made her way inside.

Opening the door, she cried out. Her father was spread upon the table. Beside him rested an open bottle of vodka, that which had come complimentary with the hut.

She rushed to him. 'Dad!'

Only a fifth of the vodka was gone, but that was a lot for a man who had drunk perhaps three times in her entire life. Around him were spread several dozen sheets of paper: all that had been left in the cabin. It was covered in dense writing.

As she grasped him, he stirred, opening his eyes. He remained in place, staring vacantly along the surface of the table. 'You're right,' he said, gesturing to the papers. 'They're right.' Now that Vogel was overhead, she could that they were covered in crosses and scriblings out, red marker overwhelming blue. 'I couldn't even solve the first term. Six months ago, that would have taken me half a minute.'

'It's okay, Dad. I'm here.'

'I'm disappearing, Nina. Every second that passes, I'm disappearing.'

'No Dad, you're not,' she whimpered, leaning down. 'I can still see you.'

He stared back at her. After a few moments, his face changed. 'I'm sorry,' he said, shaking his head. 'I should have listened to you. I'm supposed to be spending this time resting; enjoying our time together.'

'You don't have anything to apologise for.' She hugged him, burying her tears.

He got up unsteadily and she helped him prepare for bed, making sure he drank some of the newly thawed water.

The snow squall had stopped by the time she returned to the table, collecting the papers into a stack. She seated herself before the burner, intending to throw the whole lot in. But curiosity got the better of her.

Sorrow bit into her as she began to leaf through the scribbled, unfinished pages. Line upon line of equations petered out into nothing; diagrams disintegrated onto the paper. Everywhere in red were written words like "IDIOT" or "CRETIN". It was true that he was changing.

Soon it became too much for her.

Reaching the bottom of the stack, she returned to the first page. Her muscles strained against themselves, yearning to cast it into the flames. But for a moment her gaze remained locked at the centre of the sheet, at that central equation: the one that had started all of this. Something stirred at the bottom of her mind. A possibility.

She did not allow the thought to complete. Overcoming herself, she threw them in.



Suddenly, Vogel tasted metal. In an instant, she remembered where she was. Looking around, she heard the distant echoes of Boris and Sofia muttering; the whirr of the overturned air conditioning. She could feel the draft sawing into her. Yet, all was dark.

No it wasn't.

She was behind her desk. The picture of her and her father perched on the corner, gazing at her. She thought back to the day that he had had his Rusalka idea. It was as clear as if it had only just happened. She remembered that look on his face: that expression of empty defeat as he had laid on the table. That had been the last time he had done any physics. From that day onwards, he refused to talk about it.

She recalled the subsequent months of decline. Would it have been the same if he had known he had been right? Might he have rallied?

The thought had attacked her from nowhere.

Nearby was a whiteboard. She made her way purposefully over to it. Around the border were pasted the sheets that she had collected from the table, still covered in those scrawled insults. She began writing, eyes darting between the papers and her own pen. It all came to her so quickly. In the centre, she drew a KnK-6 device for reference. Around the border, she performed the necessary calculations to derive the parameter settings. In a matter of minutes, it was done.

'You're were right, Dad,' she said stepping back. 'It is beautiful.'

'Almost,' said a familiar voice from beside her. 'You made a copying error.' She turned, seeing her father point to one of the limit integrals.

'No don't change it,' he said as she went to correct it. 'What you have is correct.' He looked at her. 'You added just what was needed.'

She stepped back, rereading the calculation, confirming that it worked. Her father joined her side. 'You were always better at practical implementation than I was,' he said.

She smiled. The two looked up at the diagram: his neat digits combined with her scrawl. As they watched, the dark around them turned to white.



Vogel awoke. At first, she did not know where she was. She could not remember

what had occurred. All she knew was that some thought was hammering desperately on the inside of her skull. Then the goggles were removed and she was once again confronted with the dim interior of the station.

‘Good job, Ms Vogel,’ said Frog, approvingly examining the output. ‘We got it.’

Sánchez gingerly set about removing her straps, wrapping a moist towel around the sore electrode points. Only after Vogel moved did she see the display attached to the memory retrieval device. And there it was: Rusalka. Recollection came crashing back into her. Back on that final run of memory locking, something had happened. The machine had made her work it out. She didn’t know how, but it had.

‘How long?’ Sánchez asked Frog.

‘Another ten minutes processing. Then we should be able to skedaddle.’

‘Ske—?’ asked Vogel blearily.

‘He means leave,’ Sánchez said sharply. Her kind, friendly demeanour had mostly dropped away.

Vogel’s thoughts were now coming at a thousand metres per second. Had she really just given the codes to Rusalka? Would they work? She thought back to her discussions with her father about what might happen if just one side had access to such a weapon. The result could be catastrophic.

‘Strange,’ remarked Frog, lingering before the display. ‘I’ve never seen a retrieval path look like this before. Looks almost like—’ He was interrupted by the booming screech of an incoming transmission from the corridor outside.

‘Is the copy good?’ asked Sánchez shortly.

‘Well, yes. It’s good.’

‘If it’s good, we’re good,’ she said.

‘Right, ma’am.’

Vogel watched as the data was transferred out of the retriever to a portable drive. That was when she made her decision. Nobody else was going to be hurt as a result of her mistakes. She knew that she had to stop them from getting away with the codes.

But how?

## 19 The Climb

The night air blew in warm through the open window of Bueno's study. With each gust, the insect screech of the jungle outside grew louder. The settler engineer consulting the dark-wood terminal bank sat back in his chair. Another translated his report.

'It seems that they are in the forward auxiliary command station. They've used their control there to block all entrances to the section.'

'How long would it take to cut through those blast doors?' Sokolov asked. He was in borrowed astronauts' uniform.

'At least ten hours,' came the reply.

Silence followed as Sokolov considered. Makarov thought vividly about what Vogel must be experiencing right now. They would already have worked out that she had tried to betray them; what terrible things would they be doing to her? How long would she last?

'That's too long,' said the once-Colonel. 'We'll have to go around.'

'You mean run EVA?' asked Frunze.

Sokolov moved to the three-dimensional projection. The tip of his pen found the edge of the habitation disk, then traced a line along the sunward side to the centre, following the whole construction as it rotated. 'There's an access ladder leading to the outside of the section. A team would only have to get as far as this airlock.' He indicated a point three-quarters of the way into the centre.

'And, uh, will this team do once it is up there?' asked Bueno timidly.

'Apprehend the intruders. By use of force, if necessary.'

'By force?' the governor asked. 'What about damage to the station? This section is where our principal solar-thermal power generation is located.'

'Any damage is unlikely to be critical.'

'Unlikely to be critical?' retorted Mrs Bueno. 'Our settlement relies on that equipment for its survival. And some of it is very expensive.'

Sokolov looked levelly at the pair. 'Forgive me,' he said, 'but was it not *your* settlement which harboured the American agent for the entire trip from Mars?'

Comrade Sánchez is missing from your roster, is she not?’

Mr Bueno shrank backwards. ‘Comrade, we assure you that we are doing everything in our power to assist the Soviet government in this operation.’

‘Good. Then you won’t mind giving us access to your armoury.’

Frunze looked on uncertainly. ‘Still, damage would be undesirable,’ he said.

He moved to the internal phone and put a call to engineering, waiting for the line to connect. ‘How long until you think you can fix the primary antenna?’ The buzz of Pavlov’s voice did not sound positive.

He replaced the receiver. The answer was unchanged: six hours. Transponder data indicated the ingressing ship would be there in two.

‘The only way to get a report out would be to use uncoded morse.’

‘That would be to give away the one thing we have on our side in this situation,’ said Sokolov. ‘Surprise.’

Frunze seemed to ruminate painfully for a long time. ‘Alright,’ he said. ‘We proceed.’

Sokolov nodded approvingly. He turned to Bueno. ‘Governor, I will also need you to show me to the agricultural store.’

A call to records furnished them with a list of EVA-proficient personnel. ‘Comrade Lieutenant, I recommend you select from these your three most capable crew. They will accompany myself and Makarov on the entry.’

‘Why?’ asked Frunze.

‘I have the training,’ Makarov assured.

‘No, not you. I mean why *you*, Sokolov. Why are you helping us?’

For only the second time that day, Makarov saw the ex-Colonel express emotion. This time it was offence. ‘I’m surprised to hear you ask that, Lieutenant,’ he said. ‘I swore the same oath as you to defend the Soviet Union and its people, as long as I drew breath. If you think that the oath ceases to apply when we remove our uniform, you are incorrect.’

Frunze narrowed his eyes, then relented. ‘Well, I’ll be leading the team from the front.’

Sokolov looked at him doubtfully. ‘Are you sure that is wise, Lieutenant? A lower-ranking officer would be more standard in this situation.’

‘No,’ decreed Frunze. ‘The commanding officer should be overseeing this directly. Pavlov can take over while I’m gone.’

In an hour, the team had assembled at the southern forward airlock. They were Frunze, Sokolov, Makarov, Sliminov: a senior astronaut with terrestrial combat experience, and Palitsin: a young technician who had the most EVA hours of anyone aboard.

Makarov was helped into his personal suit, then joined the others. Sokolov handed them their weapons and equipment. He was conferred a standard atmospheric pistol. Palitsin received a torch cutter, while Sliminov was burdened with a seemingly modified portable crop sprayer, the tank fitting snugly over his suit.

Forming a procession, they entered the cramped space of the airlock. The door was slammed shut behind them, the thud muffled in the close-fitting helmets.

'All ready?' Sokolov asked over the common band.

One by one, they confirmed.

'Beginning depressurisation.' There was a loud buzzing and Makarov felt the extreme tightness of the suit immediately start to subside, the gas inside him pressing outward. Gradually the buzzing faded, leaving only the forced slowness of his breathing; the occasional click of the helmet joint. He tried to think back to his emergency EVA training: focus on the body; stay loose; keep a high moment of inertia.

The lights inside the airlock turned from yellow to green.

'Okay,' said Sokolov in a low voice. 'Let's go.'

'*Oorah! Oorah! Oorah!*' they shouted into the band, exchanging fierce looks through their visors. Then they set their radios to no-transmit. Frunze swung open the outdoor and they filed out.

They found themselves standing on a narrow metal catwalk. It extended twenty meters in each direction, following the curve of the outer rim, before abruptly ending. On their one side stood the sheer face of the habitation disk, blinding bright in the sunlight. On the other side hung the sun, motionless against the black sky. All else was void, including beneath their feet, which could be seen through the thin-looking metal grating. Earth was not visible from this side of the station.

They made their way towards the ladder, ten meters away. Reaching it, they connected tethers. Frunze was the first to begin climbing, stepping onto the narrow metal foothold. Palitsin followed, cutter slung over his back; then Sliminov, Makarov, and finally Sokolov.

The convey proceeded slowly, conserving energy. They had taped as much of their suits as they could, trying to avoid any glints giving away their movement to the enemy.

Leaning back, Makarov could just about see their destination, half a kilometre directly above them. It was a ring of windows at the base of the solar tower, behind which sat the secondary control room. They would be in plain sight the entire time. About fifty meters before it, the ladder reached a second catwalk and airlock, which was where they would enter the section.

He was glad that he could not look down. By now, the catwalk would be several dozen meters below them. The ladder was set into a shallow gully, meaning that if somehow someone were to fall, they would likely hit it, breaking their neck. The alternative, however, was tumbling into free space, beyond all rescue. Makarov caught himself imagining slowly running out of oxygen as his suit systems failed. *Focus on the body.*

He was breathing heavily, sweat starting to pool in the joints of his underdress. In what was still close to one G, the weight of the suit and equipment was significant. But with each step, it grew very slightly lighter. As he carried out the repetitive motion of climbing, Makarov felt the instincts come back to him: the regularising of his breath to match the oxygen inflow; the tensing of his stomach to keep blood flowing to his legs.

A hundred meters up, they reached the edge of the solar reflector farm. A silver sea of tens of thousands of angled mirrors stretched away to left and right. These reflected their sunlight up to the tip of the solar tower, where it was combined into a single torrent of energy and directed down to collectors near the centre of the disk.

Makarov could see the bodies above him tiring. He gritted his teeth, focusing on the shadow etched into the metal before him. His suit showed the heat exchangers at ninety per cent capacity.

Thankfully, the gravity had now substantially weakened. Soon it dropped below half a G. Makarov could now climb relatively easily. However, he had to do ever more work to balance the coriolos force trying to drag him sideways off of the ladder with each step.

The party gradually began to speed up, the sharp edges of the mirrors hurrying by on both sides. Soon they were more hopping than climbing. All the while, the control tower loomed ever larger before them. Makarov was sure he could see

movement from beyond the brightly lit windows.

Were they going to be spotted?

The party was now almost at the airlock. To both sides, the field of mirrors ended, dropping away to solar inlets. These were where the collected sunlight was beamed from the tower into the disk, whereupon further mirrors redirected it outwards, dispersing it over the forest and plants. Other inlets further ahead fed the thermal power stations. Makarov thought of the monumental energy held in those invisible beams, mere metres away. If an arm were to stray into it, it would be instantly vaporised.

They continued pushing, approaching the second catwalk from below. The airlock lay, ten meters or so to their right along the platform.

'Breaking radio silence,' Sokolov announced. 'Line up tight under the catwalk, where there's cover. Then Lieutenant, proceed to breach.'

They obeyed, lining up as close as they could get at the top of the ladder. Frunze allowed himself a few seconds of rest. Then he propelled himself forward.

Grasping the handrail, he cantered against the low gravity to the airlock, unlocked it, and heaved it outwards. Fortunately, all airlocks were kept unlocked to the outside in case of an EVA emergency. Then he stood by the door, waiting.

Palitsin followed, was received by Frunze, then manoeuvred into the airlock. A moment later Sliminov had done the same.

With the ladder above him now empty, Makarov had a clear view of the tower. As he steadied himself, preparing to climb through, his eye was drawn to a sudden change in the light. A white crescent had appeared against the metal, what could only be an airlock opening. It briefly darkened with a silhouette.

No sooner had he opened his mouth to speak, when a bullet smashed into the metal beside Frunze. It released an explosion of sparks which fell away below them. The Lieutenant ducked instantly inside, hitting his helmet on the rim.

'Are you hurt?' asked Sokolov.

'I'm fine.'

More bullets came in, impacting the catwalk above Makarov. He instinctively cringed inwards, retreating as far as he could into the ladder recess. With each impact, there was a bright flash. They were tracers, purpose-made for use in vacuum.

'Get ready to move,' ordered Sokolov. 'I'll provide suppression.' He began to climb back down. 'Lieutenant, help cover from the airlock.'

'Right.'

Sokolov climbed the last few steps until apparently the catwalk barely shielded him from the attacker. He raised his pistol. 'Ready Makarov?' He signalled he was. 'Alright, displace!'

He emptied the magazine. Makarov was instantly moving, his legs pushing upwards as hard as he could go. The shots, which had become intermittent, now started going wide. Wrenching himself to a stop on the handrail, he dashed forward towards the airlock. A bullet impacted above him, ricocheting into the catwalk, fizzling into a pool of pyrotechnic. He strode around it, was caught by Frunze, and dragged into the airlock. The hands of the other two brought him to rest.

'I'm in,' he panted.

'Alright,' replied Sokolov.

He clambered his way to the top of the ladder. 'On my mark, try and drop them. Sustained fire while I move.'

'Right.'

Makarov caught his breath, drawing his pistol. He and Frunze positioned themselves at the lip of the airlock, as if firing from a trench. 'Ready!'

'Mark!'

Makarov extended the pistol, searching for their assailant. The dim flash of Sokolov's bullets landing told him where to aim. Placing the aperture several meters to the right to account for coriolis, he released the contents of his clip. Frunze did the same with the shotgun, each shot producing a loud whoomph. Immediately, the incoming fire dropped in accuracy.

'Moving!'

Makarov continued firing as Sokolov emerged. But it was clear that the latter had been producing most of the suppression. As he ran, a final hail of bullets came in, illuminating the catwalk in an orchestra of flashes. But none found their mark.

Before Makarov even had time to look, Sokolov was there, climbing into the airlock. Directing them in, he reached into the continuing maelstrom and swung the outdoor closed.

## 20 Solar Furnace

'Well that was fucking close,' breathed Frunze.

Sokolov moved past him, grasped the red lever of the backup flood valve, and swung it open. Nothing happened. He tutted. 'These emergency tanks are supposed to be refreshed every month, Lieutenant,' he said. 'Comrade Palitsin—' He indicated the inner door. 'Please cut a ten-by-ten breach to permit equalisation.'

The technician nodded. 'You might want to stand back, sir,' he said to Frunze, moving to the inner door. There he ignited the turquoise flame of the cutter.

Steadying himself, he directed it to a point at the edge of the door, angling the cut away from him. It took only a few seconds for a small circle of glowing orange to appear, turning rapidly to white. Then, suddenly, a jet of gas burst from its centre, hurling flecks of molten metal into the nearby wall. A brief halo of flame hovered about the breach, fading rapidly as the inflowing air cooled the metal. Makarov felt the material of his suit once again begin to compress about him.

Out of the silence gradually encroached the sound of distant sirens, mixed with the hissing of the inflow. Sokolov, who had made his way to the rear of the airlock, peered through the narrow viewing port. 'They wish to fight in darkness,' he muttered. 'So be it.'

Gradually the hissing faded, and on Sokolov's orders, Sliminov resumed his cutting, carving out the locking mechanism. Thick, blueish smoke drifted in toward the occupants. In less than a minute the lock gave way, emitting a dull clunk. The handle now turned freely in Sokolov's gloved hand.

He pulled from his suit-belt one of the emergency flares, unscrewing the top. 'Give me an opening, Comrade Palitsin. Sliminov, be ready with your shotgun.'

The technician obeyed, steadying a hand on the door, then gently opened it. The sirens, already loud, turned instantly to a roar. The Americans clearly wanted them deaf as well as blind. Sokolov struck the flare and tossed it through, eyes tracking about it through the viewing port. 'No apparent movement,' he reported. 'Sliminov, with me. The rest of you, be ready to move. Have your weapons prepped, but do not fire unless I say so.'

Activating his helmet light, the ex-colonel opened the door the rest of the way, pistol levelled. An instant later, he had propelled himself through. Sliminov followed close behind, his shotgun held to his shoulder with one hand.

'Clear,' came Sokolov's voice through the radio. 'Deploy by pairs.'

One by one, the rest of the party followed, arranging themselves along the wall of the darkened corridor. The sputtering light of the flare lay some way down, casting about it a shifting scene of pipes, gratings, storage lockers, cut into red and black. Beyond lay only darkness.

'Let's proceed,' Sokolov said. Like the rest of them, Makarov had memorised the route. First, they would move in a straight line rearwards to the section bulkhead. Then they needed to ascend a maintenance stairwell. Finally, it was back through the generator halls, after which they would be outside the auxiliary command centre.

'Sliminov, Palitsin, face front. Frunze, Makarov, cover the rear.'

The column carefully set off. Soon the flare was behind them, and a short time later it fizzled out, leaving them alone with their torch lights. Out of the dimness loomed more lockers, more endless, writhing pipework.

Soon they reached the bottom of the stairs, which were still dimly illuminated by emergency strips. Weapon aimed upwards, Sokolov tacked about, his torch dancing over the empty metalwork.

They began to climb, each covering the movement of the man before and after him. As they rose through one level, then another, the gravity further diminished. By the time they approached the top, they were propelling themselves with one hand.

'Why aren't they fighting?' asked Palitsin, whispering despite the suits and radio.

'They're waiting until we reach an easier-to-defend position,' replied Sokolov. 'Now, keep this line clear.'

Reaching the end of the well, they again paused, Sokolov checking the way ahead. He struck a second flare, sending it into the space at the top of the stairs, where it turned in a slow circle. The shifting light illuminated four more approaches, one of which ended in a heavy metal door.

'That's the way back to the rest of the station,' Frunze said. 'Maybe we should try to open it. So others can come through?'

'There's no time,' replied Sokolov. 'We'd need to cut into the hydraulics.'

They reassembled, now adopting a zero-gravity formation, each man covering one of the four walls, then proceeded. The pounding of the siren was increasingly joined by an even more deafening roar from the way ahead. With every one-handed push forward, Makarov braced himself for a bullet to strike from the opaque darkness. But none came.

After one section of corridor, the space opened abruptly out. The roar was now rattling the very air itself. Ahead, their torches touched enormous dark conical casings, electrical wires the width of subway lines. Baffles reached out like the vaulted ceiling of a cathedral. They were in the generator hall.

The number of possible attack directions had now multiplied tenfold. Moving carefully, using the bus-sized transformer banks as cover, Sokolov scanned the space. All was still.

'Let's go,' he said.

As before, Sliminov and Palitsin covered the way ahead, while Makarov and Frunze watched the rear. They propelled themselves backwards, feeling blindly over the handrail, weapons pointed into the darkness re-encroaching in their wake. More than once, Makarov thought he saw movement, as if a ghostly white shape were following them. But as soon as his eye went to it, it was gone. His mind must be playing tricks on him, he thought. Adrenaline was burning his veins.

'Do you see that?' asked Frunze.

Reaching the end of the first hall, they passed through a maintenance hatch, barring it behind them with velcro tape. Then they progressed through the second. Pipes screeched with the flow of superheated steam, drawn from external heat exchangers illuminated by the solar tower, which was fed into the narrow end of the turbine. Lubricant oil bulged from between riveted joints, a dance of changing patterns formed on it by the vibration.

At the far wall, they were met another door. The sign outside read *Ingeniería*.

'This is where they will make their stand,' said Sokolov, consulting his internal map. He gave them their instructions. He and Sliminov would attempt a flanking manoeuvre; the others would facilitate with suppressing fire. 'Frunze and Makarov, I want you to lay down a field of fire. Once our manoeuvre is complete, you will be able to advance. Comrade Palitsin, you cover the rear. They may yet try to get behind us.'

They all understood.

Sokolov placed his hand on the metal of the door, as if sensing what lay be-

yond. Then it moved to the handle. 'Ready up.' They lined themselves behind him. 'Sliminov, hand me a flare.' The technician obeyed. Sokolov adjusted his position on last time, then struck the flare. With a heavy push, he sent the door swinging inwards. Silence. In a deliberate motion, he threw through the sputtering pyrotechnic.

Instantly, a hail of bullets bit into the metal on the far side. One whipped through the opening, ricocheting down the corridor. Makarov cringed instinctively against the wall.

'Contact confirmed,' shouted Sokolov. He peaked his faceplate around the gap. 'I count two gunners; automatic. Makarov, Frunze, wait for them to reload, then begin firing.'

Makarov swung himself to the entrance, teeth locked together. The bullets continued to spark in bursts into the metal above him. Then there was a brief pause. 'Now!' He raised himself, swinging the pistol like a club. The flare had been expertly placed, turning slowly at the centre of the large space. It illuminated lines lathes and soldering stations. At the end of the section, he saw the glint of a helmet. He fired, pumping the trigger as accurately as he could.

Sokolov fired several carefully aimed shots with the shotgun, then passed it to Frunze, swinging unflinchingly into the section. Sliminov followed diligently behind. Immediately the incoming fire returned, zeroing in on their position.

'Moving around,' reported Sokolov.

'Affirmative,' Makarov shouted.

He and Frunze kept firing, ducking backwards every time bullets smashed into the metal around them.

Then, suddenly, the scene at the far end of the compartment was illuminated in hellish yellow. The gunfire in their direction stopped dead. Makarov's suspicions about the adapted agricultural sprayer were now confirmed: it was a flamethrower.

'Let's go,' shouted Makarov, heart thudding in his chest. He swung himself around the doorway and headed into the compartment. He took cover as the others joined him. Another burst of fire turned the room the colour of death. Black smoke poured past them a new, more insistent siren joining the others. The returning gunfire again reignited, but was less accurate and concentrated than before.

'Flame unit is exhausted,' reported Sliminov.

By now the end of the compartment was an orange blaze. Even as Makarov watched, the flames spread, the air shimmering and pulsating before them. A containment net was disintegrated, releasing crates of who knew what to join the inferno. The suppression system had activated, but to no effect.

He moved up again, sheltering behind a machining jig. They were now close enough that he could see the shifting black silhouettes of their opponents briefly exposing themselves. Without hesitating, he opened fire again.

A volley returned in their direction, shattering the equipment. Makarov was caught in the arm by shards, but none penetrated. He continued firing. He knew that they were running out of time. Every part of him buzzed with raw energy. Past the end of his gunsight, he saw bullets land with flashes against the chromed machinery protecting the black figures.

A second burst of return fire raked the metal around him, sending him sprawling inwards. But Frunze was ready with his own weapon. He propelled himself past the cover and began firing, as Makarov fumbled in a new magazine.

Palitsin continued to cover the rear approach behind them, hemmed in by the thick smoke.

The fire coming their way was now noticeably less organised, though no less ferocious. The blaze at the end of the section had now turned to a glow, the room being completely devoid of oxygen. The air around it continued to dance and bubble.

A long burst of sustained gunfire announced that the defenders were still holding their position. 'Keep up that firing,' urged Sokolov. 'We've got the enfilade, but we're running low on ammunition.'

'Right,' replied Makarov. He continued his suppressive fire, the heat shining through his gloves. But the effect seemed to be diminishing. Even at this short range, the defenders were now almost impossible to see through the choking haze of smoke and water droplets. Yet, they did not seem to have the same problem, as bullets again raked the area around them. Straining his eyes, he tried to find a target, to no avail.

Then something caught his eye: a pipe snaking its way into the defender's position. It was the same as those he had seen feeding the smelting furnaces. Those carried oxygen.

He did not think long enough to hesitate. He aimed for the object and fired.

No sooner had he pulled the trigger, when a deafening roar pummelled the

air. The whole area around the defenders turned to white, then blue, then livid yellow. The sudden change in pressure lifted Makarov from his position, hurling him backwards in a hail of burning embers. It was all he could do not to collide with a nearby cutter.

'Moving in!' declared Sokolov. The distinctive thump of the shotgun cut through the ash-choked air.

Makarov stopped himself, checking his suit for perforations. He realised he was facing backwards. Out of the corner of his eye, he saw Palitsin tense.

He looked around. A white shape had appeared behind them, just past the edge of the illuminated haze. For a moment he watched it. It was clearly not a man; it was the size of a basketball. That was enough to make him hesitate. Then, too late, he saw the glint of its single electronic eye.

'Watch ou—!'

Before he could finish, the space exploded in automatic fire. Palitsin was struck, blood bursting from his abdomen as bullets pummelled the metal about him. Immediately Makarov and Frunze both fired their weapons, but their shots merely knocked the device backwards. In a moment it had recovered itself, turning on Frunze.

Before he knew what he was doing, Makarov had dropped his pistol and thrown himself towards it. He grasped it, shoulder colliding hard into the wall. Bullets ripped from the guns into the fabric beside him. He could feel the jerk of its internal gyroscope as it tried to free itself, reaction gas stabbing from nozzles on its side. Be he held on.

'*Help,*' he yelped.

Then Frunze was beside him. Together, they drove the drone into the wall, holding it there. Makarov fought past jets to the device's rear, finding an access recess. Taking Frunze's shotgun, he pumped the two shots into it. The drone fell still, smoke drifting from between the seams in its ceramic plating. Breathing heavily, the two men looked at each other, then slowly released their grip.

Around them, the sirens had shut off, leaving something unsettlingly close to silence. The section groaned with the sound of heat expansion, the ventilators fighting the poisoned air. They rushed to Palitsin.

'Cease fire,' said an unfamiliar, breathless voice into their helmets. 'Repeat cease-fire. We are willing to comply with your terms.'

## 21 Signal Lost

'What the fuck is happening?' said Sánchez under her breath.

Vogel peeked past the bullet-proof glass as the last of the white-suited figures rounded the turn into the airlock. What were they doing? Didn't they realise who they had just put themselves up against?

Sánchez turned to Frog, who had just pulled up the section map. 'Can they get here from there?'

'I think so.'

'Can't we seal anything?'

'We'd need to do that for a lot of doors.'

The operative's mouth became a thin line. 'Okay. Lovejoy and I will hold them off. Start overcharging the oxygen tanks. We leave for the pickup as soon as they're ready.'

'You got it.'

Sánchez radioed Lovejoy, who was still outside, to meet her at the base of the tower. Then she collected her machine gun and made for the stairs. 'Kill sight and sound down there, would you,' she said to Frog on the radio.

'You want me the MIRC as well?'

'Yes, if it doesn't slow you down filling.'

'Got it.'

Vogel eyed the portable drive containing the plans hanging from Frog's belt. Was there any way for her to get it? She knew she had to destroy that information. And now she needed to do anything she could to stop those crew from running into the American operatives.

Frog pushed himself from his chair.

'Is there any way I can help us get away faster?' she asked.

'Sure. Give me a hand with these bottles.'

He led her around the curve of the control deck to one of the maintenance airlocks. Here was where they had moved all of the equipment, apparently so that when they left, it could be dispersed irrevocably into space. From the pile

he withdrew four oxygen tanks and a small compressor, handing the bundle to Vogel. Then he took a microwave-sized crate and they made their way back to the terminals.

After showing Vogel how to connect the compressor to the first bottle, he threw open the latches on the crate. Across the lid Vogel saw stamped: USMC. Inside was a white orb, packed in black stabilising foam.

‘Grab me those tools.’

Vogel handed him the tool roll and he spread it upon the wall. From inside he selected a screwdriver, then went to work on the white object. In a moment he had opened a hatch, into which he fed a drum of pistol ammunition, taken from a separate compartment of the crate. This was followed by a grey box, about the size of a juice carton, marked with explosive hazard symbols. After resealing, he released the object to float, fetching a flat control panel from the box.

‘We’re in business,’ he said. He directed it towards the climbway, then down into the depths of the station.

To Vogel’s surprise, she was handed the panel. ‘You want me to control it?’

‘It will control itself, mostly. But I need you to monitor the feed while I sort out the equipment.’ He looked at her. ‘Don’t worry, you’ll do fine. I’ll be right here if you have any issues.’ He pointed to the top left of the keyboard, where sat a red switch, protected by a thick swing-cover. ‘Just, whatever you do, don’t touch that. Not unless you want to punch a massive hole in the pressure hull.’

Vogel nodded, swallowing. Gently, she settled before the screen.

‘Drone is deployed,’ Frog declared quietly into his radio, as he set about collecting up their items.

Vogel watched as the device made its way through the darkened levels, searching for life signatures. All the while, dashed shuttle trips to the airlock, stopping only to swap over the oxygen tanks. Each time he passed, Vogel glanced at his belt, hoping to find that he had separated himself from the drive. But he kept it close at all times.

Turning back to the screen, she jumped. On it had appeared a collection of white figures, cut sharply in the thermal camera. They were approaching the top of a stairway. ‘We’re in position in engineering,’ said Sánchez. ‘Can you see anything, Frog?’

‘Vogel?’

'They've just reached the south-east radial junction,' she said hesitantly, reading from the display. She wasn't sure if she could be saying anything.

'What are they doing?'

'Nothing,' she said. 'Just looking around.'

'Push the button marked RAD,' said Frog from the airlock. 'That will start broadband collection.' Vogel did so, and a loud whistling crackling burst within the headphones coiled around the top of the panel. She freed them, slipping one side on. The whistling dropped slightly even as she listened, becoming interspersed with vague echoes of what was clearly speech. She strained her ears, but could not make out the words.

'Anything?' he asked.

She shook her head. 'I can't understand it. It's too distorted.'

'Figures. They must have moved to an encoded band. Keep trying, though.'

The drone continued its pursuit, first through a corridor and then into an enormous open space. Vogel continued to give updates, even though she was sure these people were walking into a trap. All the while, the half-voices grew gradually clearer.

Then, all of a sudden, one climbed transiently above the rest. The words were still unrecognisable, but the voice was not. She almost cried out. It was Sergey: he was here. He had come for her. Immediately she forgot all else. She had to stop them from reaching those operatives.

'They're crossing into the second generator hall,' Frog reported from over her shoulder. He was connecting the third bottle to the compressor.

'How long do you need?' asked Sánchez.

'About ten minutes,' he replied.

'We can give you that.'

As the last figure vanished through the connecting door, the drone automatically lifted itself from its position, crossing the space to follow. Yet, as it approached, the door slid shut. *Way Ahead Blocked*, reported the algorithm. *Recalculating Route*. Frog saw the message. 'Shit.' He consulted the map. 'That's gonna take a while to reacquire. Here, let me take manual control. You finish the tanks.'

Vogel shifted aside and Frog took over. He announced the situation into the radio.

'Alright,' said Sánchez. 'If they get to the tower, we're going to need to engage.'

'Roger that,' said Frog, wheeling the drone smoothly around. As Vogel connected the third bottle, she saw him take it back towards the corridor, steering the corners like a stunt dart. His back was now facing her; with each jerk on the controls, the disk drive danced on his belt. Her eyes fixed on it. She knew that this might be her only chance to get it.

Moving as quietly as she could, and making sure that all the compressing equipment was stationary, she crept through the air towards him. Fortunately, the reroute was keeping him engrossed. With the lightest touch she could muster, her fingertips enclosed the short lanyard, squeezing the clip. In a single smooth motion, her hand chased it away from him, zipping it into her jumpsuit.

She breathed again. How long until he noticed it was gone?

'Should I vent the excess equipment?' she asked, the idea occurring to her to blast it into space with everything else.

'Do you know how?' Frog asked.

'No. But if you tell me—'

'Don't worry about it; we'll do it as we leave.'

'Well, this tank is essentially finished,' she began. She thought of Sergey and the others, who were about to run into those guns. 'Only one more and we'll be ready. So they might as well start pulling back, right?'

Frog looked at her, frowning curiously. 'Just let me know when that last tank is at sixty,' he said.

Vogel watched the compressor, willing it to move faster. The sound of gunfire suddenly erupted, distant through the metal walls. She cringed with each shot. Scrambling, she fixed the fourth bottle to the compressor.

'Can you see anything yet, Frog?' Sánchez called, shots following her through the radio.

'Still moving,' he replied. Detour's taking longer than expected. Should be rear of them in max three minutes.'

'Alright, well hurry. They're— ther— Jesus, what the fuck was that?!'

The set went silent. 'Come in Sánchez,' Frog called concernedly. More silence.

'They're using some kind of flame unit,' said Sánchez. 'The whole place is on fire.'

'A flame unit?' breathed Frog in disbelief. He glanced at the compressor, then back at the screen. 'Hold on guys. The drone is almost there. Another two minutes and I'll be able to cover you to fall back.' The sound of gunfire suddenly rose in

intensity. 'This is gonna be messy,' he muttered to himself.

What was going to happen when that drone arrived, Vogel wondered darkly. She watched the compressor's continued glacial progress. Fifty-eight, fifty-nine, and then:

'It's at sixty!' she shouted.

'Great,' said Frog, not looking away. 'We'll be moving in just a moment.' From beneath them came the sudden roar of an explosion.

'Holt fuck!' cried Lovejoy. 'They hit the oxygen. Sánchez is— She's down!' It took Vogel a few seconds to register that there was now real fear in his voice. 'We need help.' Sweat was pooling on Frog's neck now.

'Who the hell are these people?' he groaned. Doors and fittings whipped by on the screen, walls tilting one way and then another. Smoke was now starting to fill the grainy picture. Vogel could tell that the flank was almost complete. What came now?

The compressor beeped, showing it was full. Vogel looked up desperately. 'The last tank's ready,' she called to the radio. 'You can fall back now!'

'Not yet!' Frog contradicted, glaring at her.

'They're cutting us off!' called Lovejoy in a panicked voice.

Frog appeared to turn a final corner, slowing the drone. The screen was now almost completely obscured by thick black smoke, flickering a dim orange. Vogel's body clenched as she again saw those white figures loom from the fog. Green squares appeared around them: shotgun (89%); handgun (76%). Frog turned the cross-hairs towards the leftmost shape and fired. There was a bright flash, and the figure crumpled backwards.

In a flash, she was moving. There was no time left to consider. She forced herself sideways, slamming hard into Frog's abdomen. He grunted in confusion, tilting sideways, but was able to keep a hold of the control stick. In the side of her vision, she saw more bright flashes from the screen.

The American recovered almost immediately, bringing his palm down on her. She crumpled, crying out in pain, as he tried to aim for the second figure. But somehow she clung on, keeping his finger from the trigger. 'What the fuck, bitch?' he grunted. The view of the drone suddenly punched upwards. He continued to fight with one hand.

'Frog, where are you?' crackled the radio. 'We need that support right now or we're done!'

The American was unable to answer. Vogel pushed off the wall again, knocking the headphones from his head. He wrenched at the controls, but the view remained unchanged. Cursing, he released his hand from the stick and unholstered his pistol. Then, with finger and thumb, he reached for the red self-destruct button, pinning Vogel with his other arm.

From the floating headphones, Vogel clearly heard Sergey's voice shouting out.

With the last of her strength, she searched blindly behind her. Her hand fell on the tool roll, then on the cold metal of the wrench. She pulled it free and swung the jaw with all her might. There was a gut-wrenching thud as the wide end hit the American's head and he immediately fell still. Scrambling from his grasp, Vogel saw the self-destruct button still unpressed.

She looked in horror at the blood seeping from under his hair, and that covering the edge of the wrench. She felt like she was going to vomit. Beyond his floating form, the view on the controller turned an abrupt white. SIGNAL LOST, it read.

She had to stop the bleeding. No, wait, she needed to dispose of Rusalka.

Shouting bitterly at the horror of the situation, she raced towards the airlock, fetching the drive from her jumpsuit as she went. She tossed it through the open door, hand leaving it as if it were radioactive, then heaved the way closed. Moving to the control panel, she searched desperately for something like *EMERGENCY VENT*. But there were no signs, no instructions; each desperate swipe was met with a red error message.

With a cry of frustration, she wrenched to door open again, retrieving the box. She looked around for some way to destroy it, but could see no way. The sound of movement was approaching.

With no time left, she stowed it deep behind a section of loose aluminium panel, ensuring it would not float free. Then she returned to the stricken Frog.

## 22 In Control

'The way is secure. Bring him up, quickly.'

Makarov and Frunze did not need telling twice. Carrying Palitsin between them, they plunged forward through the smog of the workshop. Someone had turned the emergency lights on—the air was now a luminescent soup. Inky water droplets swirled around them, depositing an opaque sludge across their visors as they moved.

They soon arrived at what had been the Americans' defensive position. All around, blackened surfaces steamed and hissed, still shimmering hot. Sliminov was holding one of the orange-suited figures against a patch of unburnt wall. The prisoner clutched his arm, glaring at his new captors through his sooty face plate. A short way to their left Makarov noted a second orange suit. The occupant was dead. It was a mess, scorched over ninety per cent of its body, in some places burnt right through to the flesh below.

The right foot was melted to the burst oxygen line. He had done that, he realized. His eyes went to the tortured face behind the blackened visor. It immediately as Sánchez.

Sokolov maneuvered himself hurriedly to Palitsin's side, examining the latter's check display. It had shorted. Pressing his head against the young man's bleeding chest, he lingered there for some time. As he was still, time appeared to run away out in front of Makarov. Then gradually the ex-colonel aligned himself with them.

'He's dead,' he said solemnly.

Makarov stared at the prisoner, feeling anger lashing within him. Just another victim of the Americans' greed and hubris. How many more of those would there be?

'You said that an auto unit did this?' Sokolov asked through the common band.

'Yes.'

'Then there's still a controller somewhere. Form up for search pattern.'

They left Palitsin secured to the wall for retrieval later. Frunze, who had said

nothing, lingered a moment before joining the end of the procession. His fingers formed a cross. Then they climbed the moveway to the control tower. In a little over a minute, they were edging, guns raised, into the brightness of the top deck. Sokolov proceeded first, his shotgun held to the rear of the prisoner's head. All was silent, except for the whir of sensor equipment fed into their helmets from the external microphones.

'Call out to your accomplices,' Sokolov ordered.

'I don't have any,' the prisoner insisted.

Sokolov jabbed the muzzle of weapon hard into a soft part of the man's suit. Taking the instruction, he called out labouredly: 'Hello! Anyone out there: the Russians have me.' He drew a breath. 'They have a gun to my head.'

No sound met them.

Slowly, they pressed on. The control deck was in the shape of a ring, windows facing out on all the sides, overlooking the sweeping circular face of the gravity disk. In the distance, Makarov could see the stairs and the catwalk where they had entered from space. This was where they had been shot at from as they tried to enter.

Moving around the curved space, they passed through a door.

'Stay right there!' yelled Sokolov, raising his pistol. A figure at the far end of the space was leant over, apparently tending another body.

Makarov's heart leapt to his throat. '*Don't shoot!*' he yelped. 'That's her.'

Glancing over, Sokolov adjusted the weapon downwards slightly. 'Comrade?' he called. 'Comrade Vogel?'

She raised her hands. 'Yes,' she replied breathlessly.

'Who is that with you?'

'He's one of them—one of the people who took me. He's badly hurt.'

'What happened?'

'I hit him.' She sounded almost sorry. Sokolov seemed momentarily taken aback.

'How many were there in total?'

'Three.'

Turning, Sokolov looked at the others with something like satisfaction. He indicated for them to remove their helmets, then followed suit himself. As Makarov twisted his free, he was assaulted by the chemical stench of burning which clung

to his suit ring. Holding his breath, he removed it the rest of the way. Vogel's eyes immediately found his and a shock of energy coursed through him, sharper and more powerful than anything he had felt in the fight to get there.

The group approached the pair. Vogel had the American's feet together and his hands behind him. He had a bandage from a disposable kit wrapped around his head, through which a thick oval of blood had soaked. Makarov wondered at her compassion, going straight to treat this man who must have planned to do such terrible things to her.

Nearby, the monitor to a drone unit lay open. 'This must be the one that killed Comrade Palitsin,' Frunze remarked emptily.

Vogel asked who that was. As it was explained, her face became distraught. Makarov knew that she was blaming herself for it, for all of this. He wanted more than anything to hold her, to tell her that it wasn't her fault. She couldn't have known that the Americans would still come after her; the lengths they would go to punish her for what she did.

'That eye,' breathed Frunze, staring absently through the monitor of the remote controller. 'I never knew that something could look so—so dead. So inhuman.'

Sokolov looked at him, then between Vogel and Makarov, the one shivering, the other covered in ash sludge. 'Comrade Lieutenant,' he said gently. 'I suggest that you, I, and Sliminov secure the prisoners.'

'Right,' said the lieutenant, lingering a moment longer. 'Right.' He turned. Taking the two Americans, the three disappeared towards one end of the control space.

[New version.]

'You didn't tell them?' Vogel was distraught.

'Why would I tell them?'

'Sergey, you fool. Now they will suspect you.'

'I would never do that.'

This was pretty romantic.

'I need your help.'

No sooner had they vanished when Vogel sprung from her position, embracing him. Makarov tried to warn of the sludge covering him but he was ignored. She

pressed her face to his exposed skin, and he reciprocated with his own. They hung there, harvesting every moment for all the sustenance it could give. 'Look what I've done,' she whispered.

'This wasn't you.' As he moved his hand to her arm, she winced. 'They hurt you?' he asked accusingly.

'No, it's nothing. It's from the retrieval.'

Makarov was taken aback. 'They did that? Already?'

She nodded. Makarov drew a long breath. He could not shake the feeling that something was wrong about the situation. He wanted to ask how she had managed to escape. Why hadn't they restrained her, or sedated her? But she was already withdrawing.

'They wanted something from me,' she said, looking him in the face. Her expression was grave. 'Something I didn't know I was carrying.'

'What?'

She shook her head. 'I think it's safer for you not to know. But Sergey, we can't let them find it. Either the Americans or our government. Neither side can be allowed to have it.'

Makarov eyed her in confusion. But her gaze told him she was deadly serious, her eyes adamant. This meant more to her than rescue, than love. He opened his mouth, but at that moment voices returned to the space and he closed it. He looked at her.

'What do we need to do?'

↻

'It appears we got here just in time,' Sokolov remarked, examining the pile of equipment scattered at the far end of the primary airlock.

The American prisoners stared dutifully in front of them, like wooden totems that were native to their country. They had been secured with their arms zip-tied behind them to the airlock's handrail. It was cramped, but keeping them in here was the only way to ensure that they did somehow get loose.

The one with the injured head was now awake. The impact must have been a hard one, given the amount of red accompanying the white wrapping his head. Sokolov had only just met Comrade Vogel, but he was impressed. If it weren't for her quick actions, it seemed that the Americans would probably have got away. He could see some of the reason for Comrade Makarov's infatuation.

Together, he and Frunze collected the mass of equipment and moved it out into the corridor. As he waited for the lieutenant to lock the door closed, Sokolov examined the net of items. His eye fell on something. He pulled it free, turning it about in his hands to face him. It had the appearance of a pair of goggles, but with no view through the front side. Frozen, he stared at the blank face plate, then turned it to check the terminal.



'It's not working,' said Frunze, repeatedly flipping the main switch to the bulk-head override.

Sokolov looked up from cradling his helmet. His pistol, shotgun, and flares had been gingerly demanded by the lieutenant. 'The fire probably caused a short circuit,' he said.

'Sliminov, do you think you can fix it?'

The astronaut peered past him at the control panel. 'I'm not sure what I'm fixing, sir.'

'The section's still set to manual lockdown,' Frunze explained, flustered. 'Until we can turn it off from this terminal, we're still sealed off from the rest of the station. The only other option is to go back into space.'

Nobody seemed to have much appetite for that. But they might not have much choice.

'I'll see if I can find the relay unit,' Sliminov affirmed. He collected his helmet and tools and made for the climbway. The rest eyed the radio communications terminal expectantly.

As if on cue, as the lumbering shipman disappeared, the incoming transmission light flipped blue. Frunze stabbed it through. The quartet watched intently as words materialized by line on the central terminal, narrated by the computer.

*Martyrs of Cordobia. Your report was received and situation understood. Permission granted to interrogate suspects to ascertain the presence or absence of secondary explosive device. However, priority remains immediate evacuation of station personnel and assets — OUT.*

Makarov looked at what must have been the fifteenth time at the two yellow tags clipped onto the control board before them. Each bore the international hazard

symbol for explosives. Sokolov had returned with them from the airlock, having found them among the discarded trash the Americans had planned to dispose of. The inference had been a simple one: two tags, but only one bomb. Where had the other one come from?

A search had discovered no device like the one before, live or inert. But of course that meant nothing: there were an infinity of places to hide in this section alone. Makarov did not think it likely that another bomb would have been planted: it could just as easily be that the tags had come from the same container. But it was too big a risk to be ignored. Evidently, those at the Admiralty agreed.

‘So who’s going to talk to them?’ he asked.

Frunze’s eyes dodged haltingly between them. ‘Do you have interrogation training?’ he asked Makarov.

‘No.’

The lieutenant looked to Sokolov, who nodded solemnly. ‘Okay,’ the former breathed, his gaze scattered over the message and various terminals. ‘See what you can get them to tell you.’

At that moment, their radios crackled to life with a standard hailing call. Sliminov announced over the radio that he had found the connection box and he was going to need a replacement power line to make the repair. ‘You two, um, go find him one would you.’ Makarov and Vogel affirmed, assembling their things. Meanwhile, Sokolov crossed to the airlock and unlocked the door, his hand rising to his belt. Vogel watched him.

‘Who is that?’ she asked as they moved through the empty, whirring corridors. ‘Is he from the shuttle?’

Makarov shook his head. He said that it would take a long time to explain.

‘You trust him?’

‘Well, he’s already saved all our lives once.’

Vogel glanced across, considering. Makarov asked what she was thinking. ‘I don’t know. Something just seems off about him.’ He was about to the origin of her feeling when she grasped his arm, bringing them both to a halt. ‘Here,’ she said in a hushed voice. Hugging the wall, she reached far into the void behind the panel, withdrawing a metal, cassette-like object. He took it, placing it in his suit. He already had a plan: he would eject it from the secondary airlock — the one not occupied by the American prisoners. Something this small would not be detected

flying away, and once gone it would be impossible to recover.

The problem was that they had to pass back through the main area to get there.

They collected a set of spare cables from the mechanical store, then turned about. Makarov had hoped to find Frunze still alone at the command terminal. However, as they arrived back, they saw Sokolov emerging from the primary airlock. A horrible shade of red coated his right glove.

For a moment he looked at Makarov, something like regret in his gaze. Then he approached Frunze.

'No defusal will be required,' he said in a level voice. 'They tell me they already ejected the second device.'

'And you believe them?' Frunze asked nervously, his hand hovering over the communications terminal.

'They were... totally convincing.'

The ex-colonel spoke almost as if in a daze, his knife-edge energy evaporated. For a moment he was still, eyes searching the void before him. Frunze began constructing a transmission to high command. Then, as if coming to a decision, the older man turned to Makarov.

'Comrade,' he asked. 'Does your suit still have its compressed air?'

'Yes.' Makarov, who had been trying to edge his way toward the other side of the space and the secondary airlock, now stopped.

'I think the prisoner with the injured arm may need his pneumatics replenishing. His tourniquet has a leak.'

'What about the cable?' Makarov held up a fist containing the item. 'I was going to give it to Sliminov.'

Sokolov said that he could take it. 'We need to make sure he survives the trip to the shuttle. The KGB and GRU will want to question them.'

Makarov nodded carefully.

Vogel stared at the blood-covered hand, then maneuvered herself to the airlock indoor. 'What did you do to him?' she asked in horror as she peered through the thick glass.

'We needed that information,' replied the ex-colonel.

'He needs medical assistance,' she retorted. Glaring at him, she snatched up a medical pack from a nearby equipment roll and lurched the door open. Checking his suit pressure, and adjusting the place of the cassette in its hidden pouch, Makarov followed.

The prisoner's arm was bleeding heavily, the signs of the torture clear in the torn-up flesh around the relatively clean hole the bullet had made. Grimacing, Makarov attached a hose from his suit to that of the man, transferring his air. The pneumatic band around the latter's bicep began to tighten, stymieing some of the blood loss that was making its way into the gap between suit and arm. But a rising but low hiss indicated a leak had sprung somewhere.

He heard Vogel make a sound of dismay as she started cleaning the wound with an antiseptic towel. 'He needs micro-gel,' she breathed.

'I don't have any on me.'

'I saw some. In the other room.' She got up, propelling herself from the enclosed space. Makarov was left holding the towel in compression. Bowing his head, he tried to locate the leak in pneumatic so that he could plug it with emergency putty.

'This is how you treat prisoners is it, Russian?' the operative muttered through his teeth.

Makarov didn't look at him. 'You shouldn't talk,' he said.

'Or what? You gonna rip up my other arm as well?'

Makarov looked behind him at the open door, waiting for Vogel to return so that he could leave to perform his task. The other prisoner coughed something to the first that sounded like a request to shut up. Then he cleared his throat, directing the one eye uncovered by his bandage toward Makarov.

'Comrade,' he said in a weak, level voice. 'I think you should know that, under Section 12 of the Baku Accords signed between our nations, we have a right to contact our commanding officer to report our capture. If you don't comply with these, you as individuals could face severe consequences in International Criminal Court.'

Makarov could hardly believe his ears. Suddenly, he felt anger charging to his face. He withdrew his hand from the bandage, causing the American to wince. 'And what consequences might those be? Consequences like planting a bomb on an unarmed passenger vessel? What do you think the Baku Accords say about that, huh?'

The prisoner looked at him, frowning. The other asked him something undecipherable, which he replied to confusedly, keeping his eyes on Makarov. 'What bomb? What are you talking about?'

That rage inside Makarov twisted, unabated. These men; these Americans. Their bravado for everything; their uncaring attitude for everyone except them-

selves. 'Oh come on,' he chided. 'At least have the honour to admit it. Comrade Sokolov already has you on record owning up to it.'

Another confused glance was exchanged. 'That bastard? He didn't ask about any bomb.'

Makarov stopped.

At that exact moment, a shadow fell across the airlock. Makarov turned, expecting to see Vogel re-entering with the gel. But a different figure was occluding the bright lamps of the corridor. It was Frunze. Before Makarov could open his mouth to hail, the lieutenant tumbled forward, apparently from a shunt behind above the hips. He fell, body folding inwards at the middle. As he concertinaed, he revealed Sokolov behind him, framed in the light of the rounded doorway. For an instant, he was still, features barely visible against the light. Then he vanished as the hatch slammed into its seal.

Instantly, Makarov maneuvered the body of Frunze. The lieutenant still had a pulse. Turning him, he found a cherry-red impact wound decorating the side of his angular skull.

'What the hell's going on?' demanded the American with the wounded head, his tone on edge.

Makarov didn't reply. He rushed to indoor, peering through the glass. There was nobody outside. Then a heavy thunk to his near right issued from beneath the metal, followed by a laboured whirring. Finally, a hissing began to crawl around them, taking each of the vents in turn. Almost at the same time, the suits of all four occupants began to emit the same warning chime from within the neckspace.

'*What's going on?*' repeated the American.

'I don't know,' replied Makarov, his insides thrashing against his body. He turned to the internal panel, finger-crushing into the dust-crusted buttons, trying to awaken it. But the screen remained dead.

'He did something to it,' reported the second American. 'Cut some wires or something. Before he left.'

Makarov ignored them for a moment, hammering in desperation at the panel.

'There.' The American nodded past him to the emergency alarm. He depressed the yellow-green handle into its socket. Immediately, a deafening warbling filled the space. Outside the lights changed to a flashing yellow. '*WARNING: EMERGENCY IN AIRLOCK C-FORWARD-1. ATTEND IMMEDIATELY,*' a urging female

voice began to repeat, once in Russian, once, presumably, in Spanish.

Makarov knew enough about these airlocks to know that such an alarm should open a valve to the other side of the door, equalising to its atmosphere. But he knew enough about Sokolov to be sure that he would have manually closed it. Sure enough, a glance at his suit indicated that the pressure was continuing to drop.

‘Untie us,’ implored the headwounded American.

Makarov considered it for a moment and decided against it. He hurried to the indoor, contorting himself so that his radio antenna was pressed flat against the glass. Desperately, he waited for it to show a connection to Sliminov. But the thick metal was stopping almost all signal.

His ears hurt now, the sounds of the space beginning to sound muffled, as if his head were filling with water. The pressure seemed to have stopped dropping, but that was only because all of their suits were now haemorrhaging oxygen from their open necks, thinking they were having to make up for some leak of their own. It would not take long for their tanks to collectively run empty.

All of a sudden, Makarov saw Sliminov’s suit ID appear on his wrist terminal, beside that of Sokolov. In a flash, he was shouting into his receiver with all his might. ‘Sliminov! Sokolov’s locked us in. I don’t know where he is. Watch out!’

The reply came back stuttered: ‘Wh— s— —karov?’

Makarov repeated the broadcast even more vehemently. Then the astronaut appeared at the end of the corridor, rushing in their direction. ‘R—t I —m —rlock Mak—,’ he called.

Nearing the door, he spied Makarov through the glass, redoubling his pace. Stopping himself at the terminal outside, his hand assaulted the controls. Makarov hammered on the glass, yelling his warning about Sokolov with all his might, his own voice reverberating painfully off the steel back into his head. Sliminov nodded uncomprehending, indicating ten seconds with his right hand.

The palm with still raised, digits outstretched, when from out of the narrow field of vision an arm appeared. It grasped Sliminov by the back of his helmet ring, jerking him backwards. Shock showed in the astronaut’s broad, burly face as he tried to turn, scrambling with his arms to catch either the wall or his attacker. But it was already too late. Embracing him from behind and slightly above, like an owl connecting with its prey, Sokolov pinned the much larger man with one arm, while the other brought a scalpel to under his ear. Makarov let out an involuntary

bellow of fear and disgust as the blade slid down Sliminov's neck, releasing a sheet of blood that travelled much of a foot before consolidating into sickly, bobbling ping-pong balls, fleeing with the air-current.

Once the body was still, Sokolov released it. Without looking into the airlock, he turned, his face stony, then set off purposefully down the passage, fist still wielding the scalpel. Makarov screamed into his circuit, hamming the golem-like door. 'Don't do it, Sokolov! Don't do it! Don't fucking touch her!'

He turned away from the glass, hyperventilating.

'*Fucking untie us!*' implored the headwound American. Makarov suddenly had an idea. Where was his gun? He could try to shoot through—damn the chance of ricochet. But it was no good: he had left it outside, away from the prisoners. He looked at them.

'Alright,' he shouted over the still-ringing alarm, as well as the own roaring coming from his ears. Every part of his head hurt now, his sinuses on fire. The drop in pressure meant at least one of their suits had run dry. His eyes flicked to the terminal inside his own: twenty per cent.

Crouching, he sliced through the cords binding the first American using his utility saw. Then he moved on to the one with the wounded arm. Meanwhile, Headwound started to batter the metal close to the door with the sole of his boot, the surface crunching slightly with each impact.

When the second American was free, he joined him, assaulting a different panel. Together, they began to work their way around the circumference. 'There! A feed line!' one yelled breathlessly, peering through a gap his kick had created.

Makarov understood immediately. Fishing the screwdriver from his belt, he fed the tip beneath the exposed lip and leant on it, trying to prize the panel outward. But the metal was thick and sturdily secured. He tried several shunts with both hands, then came away gasping, his heart feeling like it would explode.

Headwound took over, piling his mass against the unmoving panel. Makarov grasped at the wall, panickedly trying to re-catch his breath. He had been unready for the effect that even that small exertion would have on his body in this—now forty percent— atmosphere. It had been a mistake; one that would have failed him his cosmonauts courses. His lungs kept sucking at the air, torso undulating like an accordion, but no relief came. He should have been able to last longer than this.

Guiltily, he looked at his helmet, floating beside one of the inhaling vents. It

was a Soviet standard and therefore would not fit the suits of the Americans. Only he and Frunze could use it. He leant over the lieutenant as best he could, his diaphragm still bellowing. He was still unconscious and still bleeding. Makarov knew it wouldn't make any sense to give it to him: he could be of no use with the panel.

None of this made it any easier as Makarov reached a swaying arm for the helmet. Giving a thousand rueful apologies in his head, he pushed the narrow dome down past the airflow from his suit and into the seal. With what was now a herculean effort, he held it in place and rotated it into the locking sockets.

He turned to the Americans. They had been taking it in turns wrenching at the panel, but were now both splayed against the wall, chests likewise pounding. They looked at him but said nothing: he would not be able to hear them anyway. Makarov wrenched himself to the screwdriver and began to slam himself into it, trying to widen the gap enough that maybe he could reach the line with his saw. The opening was about twice as wide as the hairline crack it had started as. But after each new exhausting shunt, it simply sprung back into place, broadening no further.

In half a minute, Makarov was again fighting for breath. His body was still oxygen-deprived and the suit, now in conservation mode with only ten per cent remaining, was only supplying enough to live. His limbs weak, shivering, he turned to the others.

Frunze was dead, his suit crying out silently in red and blue from his check plate. The blood covering his head was dark, almost black, and dry despite its thickness. Only the part closest to the wound continued to bubble, the moisture boiling away.

The others were also still, watching him in the growing silence. Their eyes were red, their teeth gritted against what must have been agonising pain in every cavity inside their heads. They seemed unable to blink, their eyes as dry as plastic bags; membranes greying. Their lungs snatched emptily at the nonexistent air.

Slowly, they began to shiver. One brought his swollen hands together then made the Hamsa across his chest. The other simply stared in front of him. They both seemed to have accepted their fate. One by one, they met it.

## 23 Atonement

It took Vogel longer than she had expected to locate the micro-gel. She knew she had seen the stack of forest green sachets, but that image had just been one of a million scattering her mind: the debris of the last few catastrophic hours. She knew that if she survived the next week, they would be precession through her dreams for decades to come. But that was a problem for the future.

She checked room after room in the small medical and triage section before her eyes eventually fell on them. Snatching a handful, she headed back for the airlock. She was sure of one thing: nobody else was going to die today because of her. Even if that meant she was outed sooner when the Americans were fully questioned, so be it. Enough had been done.

Coming to the compartment door to the main area, she tried to pull it open via the scrunch handle. It was strange that it was closed: it hadn't been two minutes before when she had passed. It didn't budge. For a moment she was disoriented, wondering if she had gone the wrong way. But the rounded glass window showed the way ahead open to command space.

Cursing quietly at the inscrutable security mechanisms of the old station, she turned to search for another path around. Following the neon evacuation route strips, she was led drunkenly to another corridor, barred by another closed hatch. Baring her teeth, she tried this one. To her relief, the handle turned and the hatch moved with her push. However, the hinges immediately bit into rust, complaining loudly as she continued to press her forearm against it. Grunting, persisted, increasing the pressure until the patch of corrosion was cleared and the hatch opened wide enough to squeeze through.

As she did, avoiding the black, grimy edge of the door, an alarm began to sound. For a moment she panicked, thinking that she had done something to damage the station. Then an unsympathetic voice reached down the corridor, informing her of an emergency in airlock C Forward 1. For a moment she thought, then recalled: that was the one they had been in.

Forcing her way through, she leapt down the passage. Entering the command

area, she saw it empty, Frunze gone from his seat. Following the curve of the outer wall, she came into sight of the airlock. The hatch was closed. Stripes of black and glaring orange chased each other along the walls as the alarm lights spun in their holders, the klaxon alternating with the bilingual voice. Then, from out of the whirling light and dark appeared a figure, hurrying toward the epicentre of the emergency. She recognised him as the large, almost wordless astronaut who had come with the others.

She continued forward, calling out. He seemed not to hear, stopping at the controls and indicating to someone inside.

Then she stopped, hand gripping the rail beside her so hard she received a friction burn. The man was there. She was not even sure where he had come from; he just seemed to have appeared, presumably from one of the side rooms. In a single motion, he gripped the astronaut, brought something to his neck, and released a shower of blood.

She screamed involuntarily, immediately bringing her burnt hands to her mouth to muffle the sound. The man, officer, commissar, whatever he was, released the dying astronaut and turned, looking at her. Without thinking, she dropped the micro-gel and contorted, kicking and pushing herself back along the corridor. He followed her out into the command space, his motions smooth, shark-like.

She tried to cross the space to another of the passages, bounding in great strides with her arms and legs. She had almost made it when she misjudged, her hand missing the hold it had been targeting. The other, which had connected, drew her in a half circle, impacting the wall. Letting go, she tried to propel herself with just the friction of her palms. But this ended up just pushing her away from the wall and her destination. Cursing in frustration, she missed the entrance to the passage, sailing past it to land in a corner of the space, the large, slanted observation windows behind her.

There was no way out. Sokolov halted before her, one hand holding lightly to the wall. From where he was, he could reach all of the equilateral triangle through which Vogel would have to pass to escape. His other went to touch the pistol at his belt.

Vogel felt her entire form shiver with white-hot fear. It was less the thought of the oncoming death, but rather the pain that would accompany it. She imagined the rending agony as the bullet hit whatever part of her he would aim for, the smashing of bones, of internal organs.

Then, for a moment, she pushed that aside. She looked past Sokolov to the airlock, where Sergey was presumably still trapped.

'You can't leave him in there!' she shouted. 'You can't!'

After a moment, she realised that the hand of her assailant was still resting on the pistol, rather than pointing it at her. 'You need not worry, Comrade Vogel,' he said in a voice that was calm, almost kindly. 'His suit indicated he had the oxygen to survive at least an hour of vacuum.'

Vogel readjusted her position, her hand slipping with sweat against the window rim she was perched against. Her body still thrummed with imminent death. 'Why are you doing this?' she shouted.

Slowly, Sokolov's free hand left the gun and travelled to one of the oversized pockets stacked up the outside of each suit leg. 'I need your help,' he said, withdrawing an object. It was shaped like a pair of goggles. Vogel instantly recognised it as those from the memory retrieval.

'This has a data cartridge,' he said, voice still level. 'It has been removed. I would like to know where it is.'

Vogel feigned ignorance. 'Why are you asking me?' she complained. 'Ask them. Ask the Americans what they did with it.'

'I did. They insisted that, last they knew, it was present on their person.'

Vogel swallowed. What was this man? Who's orders was he acting on? KGB? GRU? Worse? Did he know what was on this cartridge he sought?

'Surely you realise they're lying.'

'I don't think so.' Sokolov drew slow a breath, his pale eyes watching her sympathetically. 'Please, Comrade Vogel, tell me where you put it.'

She withered under that gaze, but resisted. 'I didn't even know this cartridge existed. I don't understand why you think I would do anything with it.'

'Hope.'

'Hope?' She looked at him, questioning.

He raised the goggles. 'Because if you're telling the truth, and you really do not know, then I will have to ask you to populate a new cartridge. From what I know, the process can be carried out in approximately ninety minutes. Perhaps faster, if we begin immediately. But either way, I fear that by the time we are finished, Comrade Makarov will be dead.'

This fucking, evil bastard thought Vogel. It had all been a ploy to get Sergey on his own; to make him a bargaining chip. Had that been what this was all about

from the start?

'You're telling me that you'll let him live if I give it to you?'

'Correct.'

Vogel thought. She imagined him in there, the life slowly draining from him: his wit dulling; that spark, the only of its kind she had ever found, slowly going out. All because of her, of her selfishness. That would be the last thing he thought about: about how it was all her fault.

And for what? They would find the cartridge anyway, the KBG or whatever dark service this man answered to. It wouldn't change anything.

'I want protection for him,' she said. 'For both of us. At least for a few days. I want you to swear that we won't be harmed during that.'

It was a stab in the dark, she knew that. Even if he agreed, the word he gave would mean nothing. But that was more than what she had now.

Sokolov nodded. 'You have my word.'

'Alright,' she said, her breath still unsteady. 'I'll show you where it is.'



The role of bandages turned slowly, its frayed edge slowly tracing a shallow helix through the empty air. Very gradually, the less than one per cent gravity brought it to a stop near the middle of the airlock. Then it began falling backwards. Makarov watched as it inched along its path towards the outer door, past the stacked bodies of Frunze and the two Americans. Reaching out, he gave it a light tap, sending it slowly back up to what would probably be head height.

She was dead. That was clear. So would he be soon.

The whole thing seemed like a dream: the whole last five months. The meeting; the love; the secrecy. The betrayal; the attack; the kidnapping. He could almost have persuaded himself that none of it had really happened.

Perhaps that would have been for the best. He imagined the world if he had not stepped into that cabin, if he had turned away from that beautiful, unhappy face. He would be on Earth, receiving congratulations on his promotion. She would have started her new life, like she always wanted. Frunze would still be alive. So would Sliminov, Palitsin, the Captain, Overchuk, the two Americans.

By any objective standard it would have been a better world. And yet, he could not quite bring himself to wish for it. It was selfish, he knew. But that was the way it was. He could no more do so than punch his hand through the metal

door of the airlock and free himself. For in this world, the real one, he achieved one good thing. For one short, fleeting moment, he had made the world a better place.

Now it was gone. He had not succeeded in saving her. He had not succeeded in saving anybody. Nobody except for Malofeyev, he recalled. It was almost funny. That was to be his legacy.

And now he was going to die. He checked his suit readout. About forty-five minutes left. He thought about what to do with the time remaining to him. His hand went again to the roll of bandages, a single fingertip arresting its motion, then sending it turning away in another long arc.

A face appeared at the window into the airlock. In an instant, a bolt of lightning had coursed through him, burning away every other thought in his mind. It was so fast that he wasn't even yet sure what had caused it. He looked again, blinking. Then his radio crackled to life, receiving from the airlock's internal relay.

'Sergey,' a voice said.

He scarcely believed it, even after having heard her. His weak limbs racing to reorient himself, he charged to the door. His oxygen-starved mind had not deceived him. She was there, telephone pressed to her ear. 'Nina!' he shouted. For a split second, he wondered how she had got away. Then his heart dropped like an iron. Sokolov was behind her, pistol held in hand.

'Comrade,' he said, after taking the phone. 'Apparently you have something of importance with you. Please show it to me.'

Makarov looked at Vogel, who nodded ruefully. He took the cartridge from its place inside his breast pocket and pressed its flat side against the glass. Sokolov approached slightly, goosing his neck as he examined the object. 'Very good,' he said, moving to the controls. 'I'm going to repressurise the compartment. Be ready to pass it out to me.'

Air refilled the space. When the two sides had equalised, the door was opened to full. Pushing past Vogel, but with his pistol arm still held ready to bring it to her head, Sokolov presented an expectant palm. With another confirmatory glance at Vogel, Makarov slid the object through the dusty air from his position, whereupon Sokolov caught it and consigned it to a pocket. 'Thank you,' he said.

With a jerk of his gun, he indicated Makarov out and next to Vogel. She grasped his hand, the grip vice-like.

'This way.' He propelled the two along the passage to a side storage room.

There was only a single door in and out. One at a time, he pushed them inside. Makarov came to a halt among a bundled net of boxes, turning to face to the door. Sokolov lingered, swaying slightly, like a spider's web strung across the entrance.

'That bomb,' Makarov began. 'It wasn't real, was it? You invented it.'

The ex-colonel seemed taken-aback for a moment. Then he realised what must have happened. 'Yes. I constructed the device,' he admitted. 'I found a way to disguise a fire extinguisher before you or the boy awoke.'

'Why?' breathed Makarov. 'You planned all of this from the start?'

Sokolov shook his head. 'I may have invented that bomb, Comrade. But I did not invent the danger that was faced from the Americans. It was obvious even then that they had come for something of importance, something that we had a duty to prevent them from getting away with. Persuading the crew of this in time would, however, I knew be difficult.'

'So you decided to trick us?'

'Is it a trick if it is what our government would have ordered, were they in full possession of the facts?'

Makarov clasped his jaw tight, the blood raging inside his ears. 'And what about all this?' he gestured around them. 'Is this an order from our government too? Murdering your commanding officer, people who trusted you?'

Sokolov flapped slightly where he stood. 'Our circumstances have changed,' he said.

Makarov glared at him questioningly. The older man seemed to reflect for a moment, before going on. When he did, there was a hint of emotion in his voice. 'I swore an oath to this nation and its rightful leader. That was an oath that I was unable to keep, until today. I asked you to help me atone for one percent of my debt. I never would have dreamt that you would permit me to repay all of it. That all the lives, the suffering, would turn out to have meaning after all. Only after you permitted me to see what they were trying to take did I realise the full extent of the kindness you afforded me.'

The engineer frowned. 'I didn't afford you anything.'

But Sokolov offered no more. 'Glory to the Grand Architect,' he said, retreating from the doorway. It swung closed and there was the sound of a chain locking.

Makarov looked at Vogel, a new sense of foreboding oozing under his skin.

'Nina, what was on that cartridge?' he asked.

The screen displayed multiple transmissions and calls from the far side of the still-sealed bulkhead. Sokolov seated himself, ignoring them. Likewise, he dismissed those from the Admiralty. They would be treated soon enough.

Unwinding a cord, he connected the retrieval binoculars to one of the terminals and inserted the cartridge. Inspecting the terminal, he confirmed that it had data on it. He had been right to trust them. Then he set the device aside, the extraction program running on the main computer.

Moving to the External Maintenance Control, he released an astrotech. The drones were kept in a small hangar several floors below. The lead unit slid from its holder and out into space, turning in the bright sunlight. It rose slowly until it was at the level of the windows. It had the appearance of a virus: a tall white body, pricked at one end by still unfolding spindly arms ending manipulators and welders. At the other end flowered a hat of spherical propellant tanks, engines nestled between them. *TMoC – AAT – FWD1* the side read in black letters. The whole thing was about the size of a large train carriage.

Sokolov took the controls and ordered it out past the edge of the gravity ring. It moved without turning, automatically avoiding the streams of concentrated sunlight flowing into the disk as it jetted to the edge. Past the spinning rim, the drone stopped. Sokolov swiveled his attention to the screens. He took the device rearward, then in, climbing past the dim orange glow of the rear of the disk and its heat exchangers.

It was possible that the occupants of the station or the shuttle might see the drone and attempt to stop it. But he wagered that they would be far too occupied with trying to understand what had happened to the assault team, and their evacuation, to notice. Besides, even if they did, they would have little time to act before it was gone.

Reaching the central hub of the station, the drone adjusted path rearwards, passing between the slowly rotating counterweight arms, then over the windowed surface of the non-spinning dock section to where the shuttle was still connected. He consulted the ship's manifest, access to which was provided through the main terminal.

Makarov had mentioned that he was an expert in relativistic explosives. From there, it had taken only a little probing to discover that the station had been carry-

ing a shipment of KnK-7s. Given that the engineer was still aboard, it had stood to reason that so were the bombs. At the time, that had not seemed like particularly useful information. But now, it was everything.

Sure enough, the manifest he had obtained showed an area shaded in yellow marked with instructions for *ANTIMAT Class 3*. No magnetic equipment beyond 0.1 Tesla; no lateral acceleration beyond 5g. It did not have 'relativistic explosives' plastered across the screen — but it could hardly have been more obvious if it had. There was a reason the navy mostly stuck to nukes: they were far less prissy and fragile. But they were also not capable of what he was about to do.

One eye on the diagram, he bid the ship rise up the side of the cuboid until it reached the cargo compartments. Then he slipped on the telecontrol goggles. Blinking off the display, he checked one last time at the manifest, ensuring he had the geometries correct. Then, satisfied, the display went back on. He grasped the two manipulator inputs and plunged them forward. Through the many eyes of the drone, he saw its needle-like arms drop towards the shuttle. They met with a simulated clang, the graspers perforating the protective skin, then enclosing, crumpling the metal. He pulled towards him, steadying the drone in its position, then switched to a different pair of limbs. The controls were telepresence standard, the same as was used in both military and civilian installations.

With torch-cutter and buzz saw, he tore through the outmost surface, peeling it back with more manipulators. Underneath was a frame of aluminium supports, that was sectioned and likewise folded outward, the body of the drone rocking animally with each heavy motion. Revealed was a second thin hull, criss-crossed by electrical lines and a single thick pneumatic bus.

Panicked radio chatter suddenly burst on his ears from what must have been a nearby RF antenna, automatically rerouted by the drone to the control centre. 'There's something trying to get in! It looks like one of your drones. It—' Sokolov silenced the feed with an outstretched hand. Like the top of a tin, the flimsy, non vacuum-baring second hull came away with a circular ratchet movement from one of the manipulators.

The view opened up to a dark, ragged hole, thin streams of blueish light filtering past unseen structures to the camera. He flipped on the worklights. The flat, technicolour faces of half a dozen standardised containers burst from the gloom. They were swaying slightly in their racks from the motion the drone had caused, appearing like nervous cattle huddling in their pens. He swept the light over

them.

*YPP12123-9-U.*

*YPP19732-2-U.*

*MSR07358-3-D.*

He glanced a final time at the manifest. That was it. Switching momentarily to the tail camera, he checked that no action was being taken. Further down at the passenger section, a face stared out in childlike—perhaps it was a child—terror at the scene. Returning, he outstretched a manipulator and pulled the container free of its restraints.

Twenty minutes later, the drone was back. Sokolov ordered it to moor itself outside the secondary airlock, its limbs crouched around it like a tent, manipulators gripping the rim. He climbed out, tugging with him one of the oxy-acetylene cutting kits the garage had yielded to his search. The container was held right above the outdoor, clasped reverently between two of the arms.

Since he could not control the drone from out here, he severed the two manipulators at the wrist. Then, guiding the container to the door, he cut the lock and deposited the contents inside: five Goltz devices. Then he returned to the drone, picking his way up one of the arms. One by one, he severed each of the primary limbs at its base joint, discarding them into space. Then came the eye. With all this removed, he reached the front plate of the drone, a smooth, flat circle.

Finally, he returned to the airlock, withdrawing one of the bombs. It was cylindrical, with one end rounded. The other he placed flat against the exposed plate, securing it with several light brushes of the torch. With it in place, he pulled open the access hatch on its side.

He switched it on.

*Provide Access Code*, the panel bid him. He ignored it. The code for these explosives would be stored somewhere deep in within the Ministry for Ordinance. They would only be transmitted moments before whoever was the end user for these intended to detonate them. Without such a code, the firing computer could not decrypt the firing solution loaded into its own memory. That solution was integral to the functioning of the device; in many ways, it *was* the device. Any attempt at detonation would result in nothing more than a fizzle and a melted core, which the hard exterior of the device would contain. That was what made these devices so inordinately safe.

However, there was one work-around to this system: to obtain a piece of information that was even more closely guarded: the firing solution itself.

Sokolov removed the cartridge from his suit, its internal code having been rationalised and organised by the computer. He inserted it into the universal connector at the right of the hatch and pressed overwrite. Then he entered the emergency access code, prompting the device to power up its systems. A lit symbol told him that it had connected to its detonation controller. It was in the hands of fate now. Would this code work? It certainly looked the part.

He clambered back inside, bringing the remaining devices and box of controllers with him. He opened the latter before him. On the central terminal's radar display, the small dot of the American warship blipped slowly towards the thousand-kilometer mark. It had changed course thirty minutes prior, presumably upon hearing about the capture of those it was supposed to pick up. Now it was heading away, roughly towards Earth.

At Sokolov's command, the drone released itself with the two remaining arms it possessed. Its engines sent it drifting away, leaving the station behind. He scanned its secondary eye around until it caught the dim, distant infrared signature of the warship. A triangular outline appeared around it. With a tap of the advanced attitude controls, he ordered the vehicle to orient so that its fore was pointed exactly towards that incoming signal. Then he reached for the box of controllers.

↻

'What is that?' Vogel asked. She was peering beyond the single, oblong window the store room was equipped with. It looked out along the towering boom of the solar collector, the mirrors at the far end glittering with the lights of the station. Turning with the sphere of stars, a distant, narrow shape had crept into the visible section of space. Makarov took a position behind her, likewise looking out.

'Looks like a maintenance drone,' he said anxiously, eyes tracking the shape as it travelled across their view. For a moment he thought it was the others; perhaps some kind of rescue attempt or plan to stop Sokolov. But then, as the shape visibly dimmed, he realised it was moving away.

'Might he be on it?' Vogel asked when he pointed this out. 'Perhaps he's trying to escape.'

Makarov briefly considered the possibility. 'There's nowhere for him to go.'

'What about the US warship? Maybe he wants to sell them the plans in return for his freedom.'

'He wouldn't be able to do that.' Makarov shook his head wearily. 'No. He's planning something else.'

'Then what?' Vogel turned to him, her face a mix of irritation and exasperation. 'Since you know him so well, what do you think is going on?'

He gazed at her, at her dark, tangled hair splaying around her head. Her green eyes locked on his, quivering slightly. She was so beautiful to him; it was as if she were a mirage against this place of steel and grey plastic. 'I don't know,' he said. She watched him, hearing the icy bar of sorrow and regret that had sewn itself into his voice.

'What is it, Sergey?' she asked, her face expectant.

In a single moment, it had escaped: that thought that he had been keeping strictly quarantined from his mind. It had arrived soon after Sokolov had left, as he had watched her. From the moment they had arrived at the control deck, he had wondered why Vogel had been free; how she had been able to neutralise the American; why there had been no indication of any torture or mistreatment. Only then did the terrible explanation choose to reveal itself.

'Nina,' he began. 'Tell me the truth. They weren't kidnapping you, were they? They were rescuing you—or at least, they thought they were. They weren't going to kill you, or torture you; they would have set you free. Just like in the original plan.'

'Yes,' she said. 'It's true. They thought they were rescuing me.'

Makarov felt small, like a mote of dust. He didn't look at her. 'I should have left you,' he said. 'You could have got away. That way, at least one of us would have been free.'

She took his hand, pulling it firmly so that he met her gaze. 'Don't you remember, Sergey? I already made my decision. I wasn't going to leave you. That was before you persuaded them I had been captured to try and save me; before you risked your life coming here. I love you. I love you more than anything I could hope to find on Earth or off it. If I had had to leave without you, without knowing what happened to you... Right now, I'm freer than I would have ever been in such a life, knowing that any shade of happiness I might feel had been bought by your sacrifice.'

Makarov shifted in her grasp. He was unconvinced: sacrificing himself for her

happiness didn't sound so bad to him. Instead, they were both almost certainly going to die. But her gaze was fierce; immovable. There was no point in protesting.

They embraced. He felt her heartbeat thud against his neck, her head buried in the rim of his suit.

'Did we ever even have a chance?' he asked into her collar.

'I don't know,' she replied quietly.

Suddenly, he felt her grip tense. She was staring towards the window. Unraveling himself, he turned to see. A large, dark shape, was falling in front of it, obscuring most of the view. His heart instantly thudding, like a mouse feeling the cold shadow of a hawk, he examined the object. He realised that it was a black rectangle, about four meters long, slowly turning as it passed. Two strange claw-like appendages clung to opposite corners. Then, slowly the short end face turned toward him. He saw a code: MSR07358-3-D.

It took only a split second for recognition to bloom within him. It was the relativistic explosives. But comprehension came too late.

Light burst on the small space, turning it white. Makarov launched back with all his might, barely aware of what his arms were doing. One set of fingers came up in an attempt to shield his eyes. The edge of the window burned in a white-hot L, the secondary reflections from the glass and surrounding plastic likewise pounding his retina, for the instant long onslaught. For a split second, he felt he was trapped inside a chandelier: every surface, shiny, dull, even the air itself, was light itself. Then, seen through eyelids that were still only half closed, the barrage ceased, leaving a painful imprint of the room before him.

Blinking away colours that his mind barely knew how to process, he spun to look at Vogel. She was okay, likewise drilling her eyes with the sides of her wrists.

He moved to the window, peaking by parts past the edge of the metal in the direction the fulmination had come from. Piece by piece, the scene came into view, rotating with the darkened sphere above.

Where the drone had been, an expanding bubble of glowing white translucence filled the sky. The inner, more brightly lit region was roughly the shape of a conical flask, engulfing constellation after constellation as it grew. An outer, thinner layer outran it: a haze through which still-visible stars twinkled and danced madly. From the central bubble, strands projected out into space, barely visible, like streams of sand falling from a clenched hand in every direction.

And there, halfway across the sky, on a line extending from the neck of the flask

shape, a new star had appeared, brighter than all the rest.

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Sokolov examined the damage on the warship, hand playing across the controls of the EMG station. The image was grainy, different colours pulled in different directions by the extreme optical zoom used on the landing telescope. Yet what it showed was unmistakable. The grey bulk of the USS Newport News, once a rough cylinder, now wore a searing grin of white flame.

Its armour near the nose was shredded into writhing, glowing spaghetti; the hole punctured beneath spewed flammable gas into the stand-off space between the protective plates. There it ignited, charging among hidden gaps to burst from other points along the side. Like torches, the exit points melted the hull around them, sending flecks of molten metal racing away in the flow like red fireflies escaping some insect cataclysm. Beneath this hole lay another, and another, through bulkheads, pump stations, ammunition stores burning with their own incendiary coloured flames. Then, on the far side was an exit wound. It became visible as the ship slowly tumbled, driven by the escaping gas: another tangled lattice of armour, the honeycomb-like voids below shimmering yellow-white.

Something small, dense, and incredibly hot had passed from one end of the ship to the other.

Sokolov checked the recording on the readout. Whatever it was had made the journey in a little over six milliseconds. Not from reaching the ship. That was how long it had taken to get to its target. A thousand kilometres, in less than the time it would have taken anyone aboard to blink.

He swallowed.

Something felt very wrong. It was as if he were cheating. He thought he could imagine how the panicked Mahdist would have felt in his first encounter with the British Maxim gun; the Aztec upon seeing a mounted, armoured conquistador. Demons from another world, raining metal death with the voice of a thousand men; giants soaring over land and sea, delivering smoke and fire from above. Each had stepped into a new world, one where his nightmares had been made real and set against him in iron and flesh and gunpowder. Now he had joined them, a primitive, floating in a world where ghosts could tear out the heart of any ship or space station, invisible to any nuclear or automated defence.

More so for where the plans had come from. He glanced again at the decoded report firing solution and weapon plans. According to the title block, it had just one designer: Nina Vogel - PHD. This was not the work of any team or design bureau. She had completed this feat on her own.

How could he not see all this as fate? Malofeyev had seen this all. He had planned it. It was not too late for them.

Turning away from the expanding haze beyond the window, he reached for the radio transmission handset. With his other hand, he flipped on broadband emission, maximum power. After what had just happened, everyone in the inner solar system would be looking in his direction.

They were all about to hear what he had to say.

END OF PART II

Part III  
The War

## 24 It Pours

[Mackenzie ==> Newport News]

The rain pattered against the electrically warmed windows of the ZIL limousine, each droplet displaying in reverse the changing streets and buildings of what might have been any commute in Moscow that morning. Yet few of those were accompanied by a police motorcade, ploughing through the cars and trucks of Vozdvizhenka highway. As the car accelerated and decelerated, the rivers of water swayed and danced over the glass.

Khrushcheva rested with her head in the divotted headrest, left eyebrow pressed against the glass. Above, a short way to the North, a patch of the dark, gun-metal sky darkened, racing past the precipitous whisps below. Through the hole dropped the hulking, bulbous form of an Il-110 nucleojet. It was military cargo—an ugly, terrible-looking machine, much like the rest of the Soviet military. The aircraft's blistered hull gleamed dully in the polluted light, then it cleared whatever turbulence it had been navigating and climbed skywards, disappearing.

Spasskaya Gate opened before them, and the limousine rolled through with practiced silence, taking a smooth right. The yellow forms of gardeners in their rain slickers whipped past as they skirted the laws and bushes of the main artery, the Council of Ministers building rising on their right. Khrushcheva roused herself, swallowing one alertness pill, then another. She washed them back with the coffee waiting for her since they set off from Rublyovka.

A makeshift roof had been hastily erected before the entrance, box-like Palace drones still heaving at guy ropes against the buffeting winds. Rain drummed against the canvas overhead with increasing intensity. Her door was opened from outside, a moisted, guilded forearm descending to offer her ascention. She took it, lethargically hoisting herself to her feet and setting off for the entrance. A diamond of KGB gorillas collapsed around her, umbrellas angled against the stray, rain-spekkled gusts blowing in past the roof as they ascended the steps.

Through doors held open by polished guards, the party filed into the amber-

lit foyer. Khrushcheva's raincoat was taken from her. Dmitri stood waiting, file deck clasped shield-like to his side. His suit camouflaged him against the tall, embroidered lampshades flanking him on either side. Khrushcheva noticed the deep crater that had been pressed into the sofa beside him.

'Were you sleeping here?' she asked in surprise.

'They said that would be alright.'

'You know this building has dorm rooms, right?'

Dmitri's face did not change. 'They didn't inform me of that, Comrade Premier.'

They set off down the principal corridor, the core fragment of the security detail following a respectful distance behind. The mirrored floor seemed to stretch away almost indefinitely, meeting the high, vaulted ceiling at the vanishing point. A conveyor-belt of leering busts rolled past. Each was set into his own alcove, separated by great, door-sized oil paintings: more odes to vanity, or the occasional battle scene: clouds of gunpowder smoke billowing forth to mingle with smell of floor polish.

Her requests for an update to the art style inside the Kremlin had apparently never made it this far. In the palace, they had tried to placate her with scenes of ships. There was not much point pushing it further. With only four months of her term as GS left, nothing would change now. Whoever came next—probably Belyakov—could bash their head against that wall.

'Everyone's already here?' she asked, her voice echoing along in the vast corridor.

'Everyone except Lapshin,' replied Dmitri. 'They said he's in the air now.'

'Alright.'

To their left opened a broad stairway, marble like everything else, each step guided under the lip with twisted acanthus leaves. They descended.

Ahead of them, along a short stretch of narrower, dimmer corridor, was the door to the Direction Room. Two guards snapped to attention either side of it. They looked like they were in their forties: old by Kremlin standards. The Council of Minister was the only structure that had been allowed to retain staff from the Malofeyev era. Belyakov had insisted.

As they strode forward, one guard turned and placed his hand on the brass doorknob. Khrushcheva raised a hand, requesting a moment. She breathed. The door's outer face were carved from Siberian oak, engraved with reliefs from early Soviet history. She drew in the faint smell of the wood. Then she stepped forward,

the door opening soundlessly before her.

The air was different inside: cooler, more sterile. The atmosphere now meeting her lips was run through an entirely separate arterial system, scrubbing it of carbon dioxide and re-circulating it. In the event of a chemical attack, the occupants could live on for weeks inside its thick steel walls.

Around the long, angular table were seated about half of the Politburo, surrounded by an orbit of civilian and military aides. Closest to the end was Admiral Belyakov, Marshall of Space Forces and Chairman of the Council. He was accompanied by the head of the KGB, who was eating a pastry from the stack in front of him. To the other side sat the Foreign Minister; the Deputy Head of the GRU military intelligence service; and the Minister for Ideology. Chairwoman Moskvina of the State Planning Committee sat further down, fiddling with the temperature controls on the table in front of her. The only non-Politburo member was the Minister of Technology and Martian Affairs, seated more shadowy distant end of the table. Unlike the others, he had no food in front of him. Khrushcheva exchanged a momentary glance with him as she seated herself.

'General Secretary,' muttered Belyakov from beside her.

'Viktor.'

She eyed the KGB head, seated slightly further from her. Like her, his eyes wore dark creases of a sleepless night. She had spent much of the early morning waiting for him to bring her something, anything, about this shuttle stranded aboard the cyclotron station.

Now their curiosity had been satisfied.

She nodded to a nearby colonel, who was waiting by the electronic sound system. He saluted and turned to the machine.

There was a click, then a low static filled the room: the hissing rising and falling like cosmic breathing. After a few moments, a voice cleared its throat:

*My Comrades; those who toil in their deserts of freedom across the Solar system. To those who four years ago hoped for a new world, and saw it snatched from their hands by fear and hesitation. I carry a message: the Grand Architect has not abandoned you. The weapon just detonated here, RUSALKA-1, is the product of his hand. In forty eight hours, I will release it to the United States of America.*

The room was silent for a moment as the machine was shut off. The GRU deputy

head cleared his throat, shuffling the papers in the stack before him. 'As many of you by now know, this message was received on broadband networks at 02:20 UTC this morning. It's origin was the shared-service Mars cypher station: the Martyrs of Cordoba, currently at two lunar radii from Earth and receding.'

He went on: 'Five minutes before this was received, a Class 1 relativistic detonation was detected in the vicinity of the station. We believe that this was responsible for the immediate breakup of US Spaceforce destroyer Newport News, located a thousand kilometres away at the time.'

He gave a signal, and the projector rose to life, the lights simultaneously dimming. The screen displayed their best guess at what had happened: a burst of energy expanding from close to the station; a small, concentrated object accelerating away; the distant destroyer being torn in half by its passage. As the lights again rose, the room remained deadly silent.

'And what about this guy?' Moskvin spluttered from her chair, one hand still claspng the temperature control. 'Are you gonna tell us who the fuck he is?'

Khrushcheva relieved the officer from replying with a hand. She adjusted her position in the chair, which was too large for her. 'Voice tracking has identified him as ex-VDV Colonel Alexi Sokolov. He was present on the station for transport from Kuznetsky correctional facility to internment on Earth.'

'A convict?' exclaimed Moskvin, seeming almost to fall off of her chair.

There was a ruffle of papers being rearranged, coffee cups being slid across the hard surface of the table.

'How does a convict get hold of something like this?' breathed the Minister for Ideology, his expression almost fearful.

'I believe I have a theory.' It was the first time that Admiral Belyakov had spoken. Until now, he had been watching the scene, thin lips pursed into a distainful line. Now he fixed Khrushcheva with his characteristic drunken stare, his words coming slow and deliberate. 'Do you think, perhaps, this might have something to do with the intelligence operation that you authorised to take place on this station? The one that involves giving classified information to the Americans. The one that you neglected to tell myself or most of the members of this Committee about.' He gestured about them, as if giving a speech.

Khrushcheva looked at the KGB chief. He was staring dillegently down at the table, as if engrossed in reading. She would have to get used to more of this kind of betrayal, she thought. People were already making their bets about who

would be the next General Secretary. As she well knew, crises only accelerated this process.

She put the thought from her mind, returning Belyakov's glare: 'You know that I having discretion on sharing intelligence operations with the Council.'

The Admiral looked theatrically around. 'You didn't think it worth informing us that you were sending someone with knowledge of this... *Rusalka* into an exchange with the Americans?'

Khrushcheva met the eye of the Minister for Technology. He received the message. 'Actually, this couldn't have come from Vogel,' he said, all faces turning towards him.

'And why is that?' Belyakov almost laughed, swivelling in his chair.

The minister cleared his throat, smoothing out the front of his suit. 'Because we don't have it.'

Belyakov's mouth remained frozen for several seconds on the first letter of a question. 'What do you mean?'

The Minister repeated the assertion. 'A completed version of this weapon: RUSALKA-1, does not exist inside any design document inside or outside of the Soviet Union.'

'But how is that possible?'

The technology minister indicated the glossy dossiers that sat in front of all of them, mostly unread. 'If you consult page 11, you will see the result of our comprehensive search of all Ministry records. These returned no record of any weapon of this kind ever being completed.'

'But how is that possible?' repeated the Foreign Minister, when most of them had finished reading the short note.

'That is only the second-most important question facing us right now,' announced Khrushcheva. The others' silhouettes were reflected in the table before her. 'As you have just seen, Colonel Sokolov was caught while attempting to implicate the Mothersky concept. Clearly, he is still committed to that task. My diplomatic team believes that he is trying to tempt us into a pre-emptive attack on the Americans to stop them from getting this weapon. The greatest danger we face is them thinking that he has succeeded, and that we are planning such a strike.'

She paused, swallowing. 'We cannot allow that to happen. Effective immedi-

ately, I want all military forces adopting a minimally escalatory stance. Cancel all ongoing training exercises, on or off Earth. Order any hunter killers that have contact with American boats to break that contact and return to regular patrol. Anything that might look like a prelude to an attack: kill it.'

'Have you spoken to the Americans yet?' asked the Foreign Minister.

'No, but I have a call with Santoso scheduled in fifty minutes. By then, I want it clear that we do not intend to let Sokolov provoke us.'

Belyakov, who had been growing steadily more red-faced, let out a loud tut, shaking his head. 'This is ridiculous,' he declared when he saw that all eyes were now on him. 'The Americans are about to get a weapon that can blast half our military out of the sky and ground—a weapon that, for some reason, we don't have—and *you* want to shut down all of our frontline defences.' He raised an accusatory finger.

Around the table, nobody moved. Krushcheva looked carefully at the faces of the others. She could not afford to lose credibility at this vital moment.

'You will do as I have requested you to,' she hissed with as much ferocity as she could muster. It did not come easily to her. 'Unless you like the sound of a fucking treason charge chained to you.'

It worked. For a long moment, Belyakov glared at her, his face now positively crimson. She could see him making the calculation in his mind. Then, slowly, he retreated. Summoning the officers orbiting behind him, he relayed the orders, his voice little more than a grunt. For several seconds the only sound was the shuffling as they paced from the room, set against the whirring of the enclosed air system.

'I've been thinking,' began the Foreign Minister, shattering the quiet. 'This Sokolov. He thinks RUSALKA came from us, right? He thinks we already have it.' He gestured to the document laid before him. 'So if we send him this, he'll realise he's barking up the wrong tree. We can't attack the Americans with a weapon we don't have. Maybe then he'll give up.'

'Or give it to *us*,' added the Minister for Ideology. 'Then we're not as fucked if the Americans get it too.'

Krushcheva absorbed the idea. It was not like they had many other options. She nodded.

'Okay, let's try it,' she said.

## 25 The New Humanity

Sokolov examined the message that had been received through the digital decoder. It was embossed with the State Seal of the USSR High Command. It took him only a short time to read it.

When he had finished, he deleted it, placing in the return input the response:

*Dear General Secretary Khrushcheva,*

*I am glad you now perceive the full shape of your fate. I trust even a traitor such as yourself can see the path you must walk.*

The message was beamed from the primary antenna, the waves striding the distance back to Earth in a little under three seconds. Sokolov watched on the targeting scope as the blueish orb slowly swayed back and forth with the turning of the station. Night time was creeping over the Pacific Ocean, turning the fronds of a sprawling pressure system to vivid orange. On the night side was a glowing spiders web of yellow, great cities and streets clinging to the curved surface. Around the fuzzy border of the planet gittered the sharp spectral flashes of a million orbital facilities: solar collectors; drydocks; observation stations.

He knew that that blue dot was already starting to simmer. It was as if he could see the bubbles forming. Soon it would boil.

In a few years, it would be gone. The coming war would consume everything. The grand cities of Oceania and the Soviet Union would be grey, dusty forests. The orbital industry would be a halo of shattered, fragments, turning everything that tried to pass through it to dust. The system would be destroyed.

He thought of the skeletons, fertilising the soil where they lay. So much suffering he could hardly stand to think about it.

But not all would be gone. That was the point of Mothersky. The Soviet colonies, with their ideological purity, would remain. They would win the coming war. And they would return: planting new Earth, a new Soviet Republic.

He thought of the two individuals thirty meters away, locked in the storage room with the water he had given them. Righteous, vigilant, intelligent. They

were the seed of that new humanity.

He only wished that his comrades were here to see it. For a moment, he tried to summon the faces of Barsukov or Kupets, his two loyal Captains.

But he saw a different face:

*Is this what she would want, Comrade?*

Into his mind's eye had faded the pleading face of Pushkin, hand still clasped around the D1 fragmentation grenade.

The invasion caught him by surprise and he blinked, shaking the image away as if it were some creature clinging to his skin. He felt like washing himself. What had induced him to resurrect that scum, that traitor?

He turned, straps tugging him back into the upholstery of the chair, adjusting his attention to the radar display.

Not long now.

## 26 War Plans

The American faces appeared one by one, slotting themselves into a regular lattice on the screen. Behind them, the background of the East-West direct emergency line software flashed between two dull shades of white. Khrushcheva passed a finger along the top of her screen, removing a trail of dust. With it came a long, grey hair. Was it new? Or a relic of some past trial she had endured sat in this chair? She could barely remember.

Before her sat the same collection of Ministers, plus a few more, huddled about the long table. Each now had a screen identical to hers set before them; they had ascended out of the wood panelling as the connection was made.

Finally, President Santoso's face appeared. For a moment he was frozen, apparently to surveying the scene. Behind him was the flags and oak-panelling what appeared to be a similarly-outfitted conference room. 'My apologies for the delay,' he began. 'We were still chasing a few thoughts on this end.'

Khrushcheva leant forward, attempting to exude understanding. 'That's quite alright, Mr President. Glad to have you with us.'

Around the room, the physical participants eyed each other, the lines between the table and their auto translation earpieces rocking back and forth with the motion.

'So, I've had the shop looking at what you sent our way. I have to say, you've managed to convince us.'

Khrushcheva blinked. 'You mean, you believe that we don't possess this weapon?'

Santoso's face resisted the full commitment. 'Apparently your theory that Vogel completed it herself is consistent with our own data.' He pursed his lips, seemingly preparing himself for what was going to come next.

'So in the spirit of honesty, I ought to come clean on the mission of the USS Newport News. It was to get a hold of this thing. From what we could tell, the you already an operational version of the Rusalka device in service. Obviously, given the first-strike threat that would entail, we couldn't allow you guys to have the weapon without our having the same thing to respond with. We thought the

entire balance of deterrence was about to be upended. So you understand why I authorised the mission, right?’

Khrushcheva thought of the two dead on the station, apparently killed during the raid. But she nodded.

‘Thank you for your candidness,’ she said. ‘Clearly then, you can understand our concern at the present situation and the prospect of Sokolov presenting you with unilateral access to those firing codes.’

‘Absolutely. We see that. For that reason, you have my word that if he does send them to us, we will share them straight away with you.’

As she heard the words, a weight lifted from Khrushcheva’s shoulders. It was exactly the response she had been hoping for.

‘We are all very glad to hear that. I will have everything that we already possess on Rusalka sent to your design department.’

Santoso smiled, his pearl white teeth showing genuine relief. Khrushcheva rearranged the papers before her.

‘This takes us to the issue of what to do about Sokolov and the Martyrs of Córdoba.’

The President nodded.

‘Currently, she is in clear space,’ continued Khrushcheva. ‘But in a few days, Sokolov is going to start coming in range of occupied shipping lanes. Our latest intelligence indicates that he still has thirty-one weapon-capable cores in his possession. And there are almost two-hundred people trapped on that station with him.’

‘Right.’ Santoso appeared to consult someone off of the screen. ‘If he’s isolated in the command section,’ he began, turning back, ‘wouldn’t a remote missile strike be able to knock him out?’

Khrushcheva swallowed. ‘Unfortunately, only the heavy cruiser *Admiral Nakhimov* is able to range the station. And his Slate ship-killers would pose a serious risk to the structure of the rest of the station.’

She sat back in her chair uneasily. What she had just said was true. But there was another reason to not want to fire on the station: if Sokolov saw that it was the Soviet Union trying to kill him, he must just resolve to release the plans to the United States early. No matter how much she trusted Santoso, she knew that it would be better if this did not happen.

To her right, Belyakov stirred, switching on his microphone. He addressed the

big screen at the centre of the room. 'Mr President, Soviet reconaissance indicates that your corvette: *USS Mackenzie* is also on a trajectory enabling it to strike the station. We believe that the light interceptor missiles on that platform would be able to perform the required surgical attack.'

Khrushcheva watched in silence for the reaction. Santoso asked for a moment, switching off his sound. The video showed him in consultation with the others on the call, all of their mouths automatically blurred out.

Then his voice returned. 'Sorry,' he began. 'I'm hearing that even our interceptors pose too much of a danger of collateral damage. And we especially can't risk causing any more Soviet civilian casualties as part of this mission.'

They were playing a game. Neither wanted to be the one to strike the station, for fear that Sokolov might send the plans to the other side.

Khrushcheva nodded gravely, preparing her response.

'However, we've had a proposal raised over here,' proceeded Santoso before she could speak.

'I would love to hear it.'

The President gestured and a new face appeared on the screen. He was young, with slicked-back, deshevelled black hair. 'Go ahead, Mr Ryland,' Santoso pressed.

The man cleared his throat, then proceeded in a tone that was half confident, half terrified. 'Good morning, Madame General Secretary,' he began. 'My team and I have been working on a response plan. Or part of one.' He hesitated. 'The proposal is that both ships land marines on the station, where they will form a joint task force to search for Sokolov and the Rusalka plans. When they find them, they will transmit them simultaneously to both Soviet and US headquarters, eliminating any residual risk of miscommunication.'

The instant of silence that followed was shattered by forced coughing sound from Belyakov. 'An interesting idea,' the grey admiral said sarcastically. 'But I wonder how exactly you plan on getting a ship close enough to land anything, except for a few screws after he's blown it to pieces with this weapon. I seem to recall that USS Newport News's ingress plan didn't go so well.'

Khrushcheva glared at him. The analyst waited with pursed lips for the response to finish.

'You're absolutely right, sir,' he said with practised politeness. 'Getting close is the hard part. But we think we have found a solution.'

'And what is that?'

The analyst swallowed. 'Well, Sokolov is trying to start a war between the Soviet Union and United States, right? Perhaps we should give him what he wants.'

## 27 Standoff Range

Optical Specialist Jamie Leclerc sipped at the straw of her spill-proof energy drink, eyes fixed forward. With a final suck, her fingers met through the cold foil and she wrung it flat, discarding the pouch through the diaphragm of the waste bin beside her.

She took opportunity to stretch her arm, twisting against the straps of the action chair. With her other hand, she adjusted the earpiece, subtly strung on a line to her waist. The *thump thump* of Neumond's latest smacked into the right side of her head, blotting out all noise out to the bridge's forward bulkhead. The track was approaching her favourite part.

*Ich geh' durch Licht,*

*Neon auf der Haut.*

*Maschinen flüstern,*

*Die Nacht wird laut.*

She remembered what the DJ had been doing.

This was where they had started kissing. Leclerc felt the press of her firm breasts against hers; the tickle of sweat running down her back. Her face still stung from where the woman from the bar had been flinging her straightened jet black hair back and forth. The same hair was now scrunched between her fingers, her white nails flashing un-nameable colours as the world around them pulsed and danced.

The caffeine started to hit her system, providing a pale imitation of what she had felt in her bloodstream that night.

God, she loved New Orleans. It was supposed to be only three weeks until they were back.

*Admiral Nakhimov* remained motionless. It was a grey cone, tapering gently at the rear, before narrowing sharply at about the halfway line to a sharp point at the prow. Two large radiators, the only of the total four that were visible, projected

at right angles from the very stern. Other than these, the USSR insignia painted along its side, and a few antenna it was featureless, its guns, lasers, and missile launchers all depressed beneath hatches in the thick plate armour.

In most respects, the ship resembled the one she was sitting in. Only *Nakhimov* was about twice the size of *USS Mackenzie*.

The opposing ship sat at a range of seventy-one thousand kilometers, and almost side on to them. The sun blazed off the central line of its hull and off the supporting beams of the radiators, throwing flare lines across the digital image.

Leclerc touched the gain dial. As the telescope refocussed, the stars and galaxies beyond the ship momentarily became visible, racing past with the changing celestial angle between the two craft.

It had been twenty minutes since *Mackenzie* had conducted a brief burn. Now the two ships had a relative velocity of just under three hundred meters per second: still slowly closing.

No sooner had Leclerc's fingers left the dial, when the geometry on the screen began to shift. *Nakhimov* was turning.

'Bandit-1 is performing attitude alteration,' she called out levelly.

The observation was corroborated from the radar and infra-red stations to her left.

She watched as the ship slowly swung about, its prow coming to point at an off-angle from them. There it stopped. The scene once again became motionless.

Leclerc adjusted her seating, preparing for another long stint of nothing-filled vacuum watching.

Then: more movement. A small hatch near the aft of the ship opened. A shadow fell across her station. She realised that the officer on deck was now floating behind her, watching the monitor. Trying not to move, she tugged earphone from her ear, deactivating the music.

From the oblong hatch emerged a small, thin cylinder, oriented parallel to *Nakhimov* and floating away. Another followed. Then Another.

'Bandit is releasing ordinance,' she muttered in a low voice into the comms.

A train of the rods formed, floating out at a right angle from the ship. An identical procession had now formed on the far side.

Beside her, the radar operator leant back in his action seat. Leclerc hazarded a confused glance in his direction, which was returned.

'Flaring, forty-one distinct,' called the Infra-Red. Leclerc squinted at the ends of the cylinders and indeed saw they were glowing white, spewing a trail of thin mist into the dark.

As one, the two lines began to accelerate along the axis of the ship, passing the fore, where they formed a single body. They passed beyond the edge of the screen.

She waited for the call-out from radar. Thirty seconds later, it came: 'Fifty-four: travelling bearing 095; 256. *Vampire, vampire, vampire!* Time to arrive: 390 minutes.'

Instantly, she felt her heart rate jump forty points. Leaning to correct the polarization, she turned to glance at the OOD. His face was stoney, grim, but, to her surprise, seemingly unmoved by the scene playing out before them.



Thirty minutes later, they had filled the munitions hold. This was the only space large enough to fit the entire ship's non-operating company, allowing them to be addressed at once. Uniformed bodies lined the five walls: whites, blues, reds, and yellows.

At the centre of sixth, the captain hovered motionless, cap removed, presiding over the low bustle.

As the clock turned 02:15, he tugged the tannoy from its holder and presented his card to the reader. 'All hands,' he began, his voice being transmitted through the speakers around them. 'As many of you will have by now heard, thirty minutes ago, the Russian heavy cruiser Admiral Nakhimov launched a salvo of fifty-four anti-ship missiles, directed to intercept us in a little over six hours. However, these missiles will never reach us.'

'*Damn right,*' muttered a nearby close in weapons specialist, to more than a little acclaim.

'Their warheads and terminal guidance systems have been de-activated,' continued the captain. He paused. 'We have been given an update to our profile; straight from the top of the chain. This ship is now part of Joint Task Force Limur with the Soviet Space Forces and Nakhimov. Our mission is to occupy the station that killed USS Newport News and apprehend the terrorist that did it.'

A murmur of approval issued from about the room.

'Mackenzie is going to be the point ship on this. Our task is to get to gun range of the station and eliminate its defences, clearing the way for a joint landing.'

One of the astronauts raised his hand. 'So why the Ruski missiles, sir?'

The captain nodded. 'The missiles from Nakhimov will be acting as penetration aids. INT has assessed that the terrorist's goal is to start a war between us and the Soviet Union. That salvo will make it look like the Russians are trying to stop us from landing at the station. NAVCOM believes that, given the choice between letting the Soviets destroy us and doing it itself, the terrorist will wait for the missiles to arrive. This will give us sufficient time to get close enough to the station to accomplish our mission. And we, USS Mackenzie, *will* accomplish that mission.'

As the tannoy faded, this final declaration echoed vehemently through the space. Across all the walls, faces turned to each other, exchanging unconvinced glances.

They *believe*?

Leclerc was silent, adjusting her grip on the netting behind her. She would love to meet whoever came up with this plan. If she ever did, they would get a much-needed kick in the head.

## 28 Knife Fight

Sokolov watched the missiles close in on the American destroyer.

It had been six hours since they had been launched. In that time, they had formed a solid circle, slowly growing in size as they moved away from Nakhimov. Now that circle was almost a thousand kilometers across, filling the entire field of vision from the command tower. In almost every direction, the faint, moving stars of the projectiles, lit in the sun, crawled over the static background.

The US warship: USS Mackenzie, had been undeterred, continuing his dash towards the *Martyrs*. They were now a mere thousand kilometers off, and closing fast on the station.

More fool them, Sokolov thought. Had they really thought that their opponents would let them walk in and take rightful Soviet technology?

Twenty minutes before, the thin sheet of missiles had lit up on the infra-red, as they had fired their thrusters as one. Now the disk was collapsing inward, like a coffee filter being scrunched in a giant hand, with all the projectiles heading towards the same central point. That point was Mackenzie.

Sokolov knew these missiles. He knew that fifty-four, travelling at this speed, would be more than enough to overwhelm any ship of that class, nuclear shield or not.

He glanced at his watch. There was still time for the Americans to avoid their fate. An emergency blast from their principal rockets, using all their remaining fuel reserves, could catapult them back towards Earth outrunning the missiles. Yet, they showed no sign of making any course adjustment.

The explanation was obvious. They thought the Soviets were bluffing. They expected that at the last minute, the attack would be called off.

They might even be right.

Comrade Premier Khrushcheva was a coward, after all. Everyone knew that. Sokolov was certain that she did not have the will to follow through on something like this. But there would be people around her who were different. Perhaps they would see that there was no sense in delaying the inevitable.

It would not matter either way. Sokolov placed his hand on the telepresence controls for the second maintenance drone. The machine at the far end of the line lingered outside the main windows, crouched at its fuelling station. Like the last, it had a Rusalka device attached to its fore.

If they did not finish the job, he would.

Yet, as he watched the net of missiles close in, he knew he would not have to wait much longer. He could feel it. If not here, then somewhere else.

He had spent the last ten hours watching the tinder box be assembled. On the readout beside him was a procession of dark bulletins collected from the central network:

- *Reserve Submarine Fleet Spotted Departing Kings Bay*
- *Lunar Surface Pressure Doubles as Rocket Traffic Increases*
- *USAF Personnel Recalled from Leave*

It had all been there already, he thought. All the rotten material of humanity, collected on one planet. All it had ever needed was a spark.

Then, just like the boreal forest, when it was all over: renewal.

To his left, the secondary radar emitted a regular beep as it swept over Earth. He had directed it towards the planet, its input translated through the speakers. A nuclear MIRV missile attack inside the atmosphere would present as a series of short, sharp cracks, like ice crushing under foot. He settled, waiting for the chorus to begin: they would need at least one per major city.



Leclerc manouvred into her chair, fidgeting with the pressure straps through the material of her containment suit. They were wrapped around her arms and biceps, and were designed to prevent blood from pooling in her upper body. If they were working, she couldn't tell.

The gravity carousel had been halted several hours earlier. The command center was now in zero G; as were the dorms, gyms, and the rest of the common spaces. This was necessary whenever the ship went to combat alert. Any physics textbook would tell you that at the rate the ship could be turned by its maneuvering rockets, the gyroscopic counterforce produced if the carousel were rotating would tear it clean from its runners.

Likewise, the air had been evacuated from all non-occupied parts of the ship, drawn into internal tanks. This would reduce the risk of fire in those areas.

Leclerc jerked the strap around her into its socket. 'OSP-Bridge-2 on station,' she muttered into the line.

In front of her, the SITAWARE screen was already activated. It showed the incoming flight of missiles as a field of orange dots aranged in a curved surface, distributed through two layers. Every few seconds, as one, they blinked forward, stepping half a kilometer closer to the ship.

*Thirty-Nine Objects*, the information box around them informed her in the same orange as the missiles themselves. They had been whittled down to that number using the ship's long-range interceptor missiles: one for each of the incoming projectiles. But Mackenzie only carried thirty of these, and the captain had wanted to keep some in reserve. The remainder of the salvo would have to be dealt with with the point defences.

They could take some solace in know that this was exactly the task Mackenzie had been designed for. She had been built a destroyer, designed to run up to gun range to the watcher stations in geostationary orbit. Such a station could not be destroyed from range because of its laser defences: something armoured had to get close in order to dump its seige torpedoes. Destroyers were supposed to run that gauntlet, shooting down incoming missiles.

What did it matter that that had been twenty years ago and that they had been outfitted for recon patrol, carrying only half the ammunition and coolant mass they would have for a combat mission? And what did it matter that Nakhimov had launched its entire complement of ship-killers.

Leclerc had to remind herself of the captain's insistance that the Soviet missiles posed no real danger to them. Apparently, they terminal fuzing units had been deactivated: they would sail right past.

Yet, the astronauts had still been ordered to fight.

The stated reason was that the engagement needed to look convincing.

Leclerc was sure that the officers were as keen as she was to avoid having to take the Russians at their word.

But their stated reason was that the engagement needed to look convincing for the bastard on the station, so that he would not fire his superweapon at them.

'OSP-Bridge-1 passing control to 2,' her radio annouced. A light came on on her panel and she flipped a switch, accepting control of the telescope. She activated

the main display. On the screen appeared the enormous shining disk of the *Martyrs of Corodoba*. It was growing by the second, its left edge chasing the stars, while its right remained almost fixed against the background. The sunlight glinted off the great boom arms they completed their slow rotations, the bright lights at their ends flashing periodically. All else was still.

Gently, she turned one of the dials, zooming in on the sunward command bridge. She had spent that morning crawling over inch of it under the watchful direction of the first officer. She felt as if she had walked the grey, tatty surface herself.

As then, the main windows were all opaqued, with the inside invisible even to the maximum augmentation setting on the telescope's collector. Only one thing had changed. Whereas before there had been three maintenance drones and one empty cradle in the quay section at the base of the tower, now two berths lay empty.

She had been briefed on this when she had returned to the bridge. Apparently, OSP-Bridge-1 had seen the second drone be released two hours before, following a manual guidance around and entering the enclosed drydock in the side of the tower. It had not been seen since. It was, she had been told, the same vehicle that Newport News had reported seeing leaving the station, just before she had been obliterated.

He therefor had another weapon.

This was all beyond belief. Leclerc thought about what she had been doing twenty-four hours before. How had any of this happened? And why were they racing towards it?

The integrated combat overlay showed Mackenzie's railguns tracking the command tower, with the time for a shot to reach it shown. They were still too far away. They needed to be close enough that their shots would land before the asshole inside had time to decide to pulp them in return.

'One hundred seconds until engagement window,' announced the radar operator. The engagement bar had been set at five-hundred and thirty-four kilometres. This was nearer than the operational standard: a reflection of the limited thermal capacity of the heat sinks.

'Alright then,' Leclerc heard the captain mutter. There was a plastic unslotting sound. Then the general alert sounded for three seconds: a rapid throbbing the

sound of some tropical bird. 'Attention. We are now commencing defensive operations. All hands secure yourselves at battle stations and await orders from your section officer. Luck to you all.'

The announcement clicked off.

He ordered the reactors up to power. They had been running at minimum in order to allow the heat sinks to reach the lowest possible temperature. Somewhere on the far side of the bridge, an engineer would be turning a dial to release a shower of neutrons into the unshielded plutonium rods a ship's-length away from them. The vibration of the turbines, now noticable with the carousel not free-floating, hightened slightly.

'Heat sinks now rising zero-point-one per minute.' Came the call, the words steccatto. 'Up from minus five degrees.'

The reactors were now producing more heat than could be emitted by the radiators. The rest was going into the heat sink, warming it.

'Begin jamming.'

Beside Leclerc, the radar operator flicked a switch, narrowing his field of vision to avoid interference from the massive emitters which now began targetting Nakhimov, a hundred thousand kilometers away. The Soviets would now have to switch to optical rangefinding.

Leclerc watched the orange dots crawl slowly towards the translucent surface enclosing the Mackenzie.

'Engage incoming,' ordered the captain.

Outside the hull, the four electric railguns fired their first volley, emmitting a distant thunk through the whirring of the air system and muttered comms. Four shells left their barrels, speeding past the prow faster than the eye would have been able to follow. A second four went, targetting a different missile.

A third was in space when the initial salvo arrived. The shells exploded, showering the path of the victim missile with shrapnel. It fragmented in a yellow pyrotechnic flash. An orange dot turned grey on the SITAWARE screen.

Almost immediately, the remaining missiles began jinking back and forth with small puffs of hot gas. This would make them much harder to hit; but it also used up precious fuel that could not now be used for the final guidance phase. The target missile of the second volley moved sufficiently that the fragments failed to find it.

The same occurred with the third.

'Heat sinks at minus four. Rising point five per minute.'

'Reduce fire rate,' said the captain. 'But keep them guessing.' They wanted to bleed off as much fuel as possible before the flight entered the inner envelope.

For several minutes, the skirmish continued. As the missiles closed in, the probability that each volley would score a hit gradually increased.

'Heat sinks at minus one. Rising steady.'

Now every other barrage from the guns was claiming a kill. The amount that each missile could move in the time since the guns fired was now less than the reach of the shrapnel cloud.

'They're releasing countermeasures,' announced Fire-Control Radar. Leclerc glanced away from her continued scrutiny of the space-station's command tower towards the SITAWARE screen. Where there had been two hemispheres of distinct dots, there was now an indistinct mass of orange.

Each missile had projected a cloud of radar-reflecting chaff in front of it. Behind this cover, each began inflating decoys: foil cylinders the exact same size and profile as the missile itself. The process took only a moment. As each chaff cloud cleared, it revealed a dozen such objects, tumbling slowly away from one another. The missiles had shut off their engines, drifting along with their dummies.

It was the moment they had waited for.

'Principal engines, full power,' declared the captain. 'Evasive action.'

Far below them, the four hydrogen nuclear engines fired from within their armoured skirt, shunting the ship forward. Leclerc was pulled back in her chair.

Until now, there had been no point manourving. The missiles would simply have followed, and it would only have depleted the ship's fuel reserves. But now, the missiles were forced to remain inert, else they would reveal themselves from the dummies. This gave them a short window to get as far as possible from where they had been. The railguns fell silent: there was no use in wasting heat targetting what would almost certainly be a dummy.

After twenty seconds, the acceleration ceased. There they drifted.

'Heat sinks plus one. Rising point five.'

A deathly silence was in bridge. Forty kilometers to closest contact. Thirty nine. Leclerc had a ringing in her eyes as she eyed the station through the telescope. She barely had to zoom at all now — no more than an amateur telescope. They were almost on top of it. There was still no movement.

Then suddenly, the missiles sprung into life. The SITAWARE screen lit up all

over with thermal emissions. They were now closing in again, leaving their decoys behind, dodging. The railguns began firing in response. Each volley of four was able to score a hit at this range.

Yet they could only fire so quickly. Twenty-three contacts still remained, closing in on the ship at an impossible rate.

'Activate the nuclear flak,' the captain commanded. Leclerc swallowed, not looking away from the screen. A siren began sounding through the ship as it swung aggressively about.

Five seconds passed. Then, from the dorsal ordinance launchers, four missiles were ejected, forming a cross with the ship. They spun ninety-degrees, then rocketed forwards and outwards.

'Hull-down in three, two...'

The square the missiles formed expanded until it was a kilometer across, spread in front of the ship. Beyond them, the first wave of missiles collapsed inwards.

'...one.'

Leclerc's view became dark as the telescope was pulled inside the hull and covered by a blast shield. Around the smooth, conical face of the ship, all equipment vanished. Radiators, antella, defence guns folded beneath shields. Only the combat aperture radar remained, its grainy view cast upon the SITAWARE.

The sheet of missiles contracted inwards on the ship. Gradually, slowly, they came to meet the square of objects coming the other way. Then:

Nothing.

All sensors were blinded with radiation.

Outside the ship, the four thermonuclear flak missiles had exploded to within a millisecond of one another. Four spheres of blazing plasma issued outwards, streaming in every direction. Neutrons, gamma photons, infrared filled every angstrom of the space around them and the missiles. The particles battered the missiles' hulls like rain, heating them, then melting them through. The high explosives, or propellant, or chemical battery—whatever was reached first, exploded, shattering the projectile into pieces.

But the same happened to Mackenzie. Her form was a tapered cone for exactly for this reason: the locations where the nukes had gone off in front of her meant that the radiation was spread over more of her exterior. But at this range, this was not enough to save her. The outer layer of steel cladding instantly evaporated, fleeing into space, while the layer behind turned glowing orange. The force of the

evaporating metal sent a shockwave rippling inwards to the ship. It was as if it had been struck by an Olympian hammer. It did not help that it was shaped like a gong.

Leclerc cringed at the sound and accompanying thud. All around the metal creaked with secondary vibrational modes and the thermal expansion of the armour.

‘Await redeploy.’

For a crippling few seconds they waited there, breath paused, for the new radiativity of their hull to abate to acceptable levels. Then suddenly Leclerc could see again. The image was grainy, with pixels popping in and out of existence. But the space station was unchanged. There was still no doomsday weapon headed towards them.

To their far side, a small glowing debris cloud had formed. The closest layer of missiles had been obliterated. Almost all of the decoys and chaff had been vaporised at the touch of the light.

Yet, beyond these lay more, themselves glowing, but still manoeuvring.

They had got a total of... six. Seventeen remained.

There was no way. The railguns resumed firing, but the second wave was approaching too fast. All they could do now was pray that the Russians had kept their end of the bargain.

Leclerc stared between the image of the terrorist in his space station and the five nearest missiles bearing down on them. She found she *was* praying.

‘All about!’

Letting go a breath she felt like she had been holding since birth, Leclerc steadied the camera, the ship rotating about her.



Sokolov watched as the fist closed around the destroyer. He had pulled down his sun visor ahead of the use of the nuclear shield. Twenty-five missiles had emerged from that onslaught.

The charges had been distant flashes that still left dark spots on his eyes. But he had wanted to see.

If there had been any doubt about the outcome, it was now gone. Sokolov waited for the final sad show: the light of the short range cannons spewing rounds.

But they did not activate. Instead, the guns fell silent. The ship began to turn its side to the oncoming projectiles, the stars shrugging and shuddering around it. It was pointed at the station.

They had revealed their side armour. Did they want to die? Had they given up? And then: the Granites missed. All eighteen of them missed.

Then he saw the dull, repeating blue flashes of the railguns.

Comprehension bit into him like a snake.

Before he could even think, he was reaching for the drone controls to launch the device. But it was too late.

Rounds bit into the holding section where Rusalka was.

He barely had time to duck away from the window before the whole section was convulsed with explosions, shrapnel piercing the pressure hull. Beyond the bowed-in windows, the Rusalka was torn to pieces in a hail of fragments.

He fought his way to his breathing mask. Pulling it on, he hung there, back against the wall.

How could they have been so stupid? They had been so close. Did they not see what he had done for them? They were like horses brought to the edge of the river, but too stupid to drink.

Had this really all been for nothing?

He felt the black emptiness begin to encroach around him. He recognised it. Fear gripped him.

Then he looked out of the window. And suddenly, things were very different.

↻

'What is that?!' shouted Vogel over the thunder of shrapnel scouring the hull. Suddenly the hull-breach alarm blared.

'We're under attack. Get down.'

They jammed themselves into a protected corner.

As they did, a round passed right through the wall near the door, tearing a hole through the metal. Fragments immediately filled the room, before being drawn out of the gap. There was a roar. Makarov could feel the air pressure dropping around them.

He looked for emergency masks, but there were none.

They had to get out.

Vogel pressed her head against the wall, peering out through the gap.

'The door's on a latch!'

She found some exposed wiring. Shaping the power cable into a loop, she fed it through the gash.

Makarov watched as she fumbled at it.

With a heave, the latch slid open.

The door threw itself open with the pressure. They emerged into the dimly lit corridor. On the far side was the hole out into space. Objects had already started to collect around it, partly blocking it.

Makarov looked around at the markings on the corridor walls. 'It's this way to the bulkhead!'

They raced along the corridor, fighting the current of air. They turned a corner. It was dark, a power line clearly having been hit. The lights flickered blindingly on and off. Makarov checked the way forward and backwards, mortified of running into Sokolov.

The pressure steadily dropped around them.

Another corner. Then, mercifully, there was the bulkhead. The corridor curved away along it in both directions. Makarov glanced backwards and forwards, trying to remember which doors Sliminov said he had cut through.

'34A,' panted Vogel.

They followed the sign, arriving at the door. The entry denial device was still across it, but a series of blackened spots showed where Sliminov had attacked it. Examining it, Makarov saw it was no longer attached to the metal. But sure enough, it was still jammed in place. They would have to pry it open.

Makarov's eyes fell on a disused broom leaning against one of the walls. Snatching it up, he jammed the dusty end of the metal handle behind the device. He could barely hear now.

The two of them pulled as hard as they could on the handle. Makarov felt it bend, and for a horrible moment thought it would snap. But then the brace began to slip.

As they prepared to go again, Makarov looked around. Then he froze. Down the radial corridor behind them, where the radial corridors met, Sokolov appeared in the flickering light. He was wearing a breathing mask and carrying a submachinegun. He had a crowbar. He also had the briefcase with the plans. He looked to be heading to a different part of the bulkhead.

Vogel turned to look too. For a moment the three stared down the corridor at

each other.

Sokolov nodded. Then he turned, continuing on his way.

Without thinking, Makarov turned and heaved. The brace finally came away. They hit the emergency open command and it slid aside. A wave of air rushed into them. They climbed past it and into safety. The door closed behind them.



*Ten minutes earlier.*

The final volley of the bombardment ended.

Leclerc examined the damage with the telescope. A cloud of debris slowly spread from the forward section of the station.

‘All launch and communication facilities appear neutralised,’ she said.

It was thirty seconds since the first wave of missiles had passed.

The ship, having now cancelled its velocity, remained with its prow facing towards the station, all six of its guns ready fire at the first sign of a launch of the Rusalka weapon.

The radar screen showed the approach of the second wave of inert missiles. Now that the station had been engaged, the Russians had not ordered these to deploy chaff or decoys or to manoeuvre. The screen showed that none were on track to come close to the ship.

‘I’m seeing no activity,’ reported Leclerc.

‘Hewitt, keep monitoring on broadband,’ said the captain. ‘Any sign that that antenna is still working, and we fire immediately. What are the drones showing?’

‘All quiet on the far side,’ reported the drone master.

Suddenly, an alert sounded from the defence coordination control board.

‘Sir, a missile has switched on its terminal guidance,’ barked the radar operator. Leclerc looked across. One of the dots had shifted its path, now following the ship.

She barely had time to think anything before there was an almighty crash. The entire hull convulsed. Leclerc was thrown forwards in her chair, the straps jerking her backwards painfully into the chair. She looked around her as alarms squawked, filling the cramped space. The entire room was gyrating, oscillating backwards and forwards, loose items spilling forth into the air.

‘Damage report!’ shouted the officer on deck.

'Impact of the starboard stern. It passed through reactor 2 and detonated in the primary propellant tank cavity. Secondary explosions in compartments 3 to 5.'

The captain grasped his intercom. 'Damage control teams compartments 3 to 5, to station.' He turned to the defence coordinator. 'Make sure nothing else gets through our point defence.'

The internal coordinator held his headphones to his ear. 'They've got flooding in 2B.'

'Leclerc, Hajjar, go and help them.'

Leclerc nodded, unbuckling herself. She made for the door, grabbed an oxygen mask, then headed down the corridor. The air was thick with the smell of unseen electrical fires.

She had still only just begun to comprehend the situation. Had the Soviets betrayed them? Could that really be what had happened?

They arrived at 2B to find the entranceway almost entirely filled with oil. One of the lines to the heat sink must have been ruptured by the pressure wave. Other crew were trying to brace the leak. They were hammering in wooden wedges.

Leclerc stepped into the spray, it covering her oxygen mask. Instantly she was shivering as the freezing ooze clung to her.

They managed to plug the leak.

She stepped out and was barely cold any more. The others were sweating. The ship was heating up.

## 29 Clear Skies

[The missile did not detonate. But its fuel and explosives did start a fire.]

'What happened? One of your missiles hit?'

'We don't know that for sure. It could be a trick.'

'What the hell is the meaning of this?' President Santoso's face had barely appeared on screen before he began speaking.

'I'm sorry, Eric,' replied Khrushcheva. 'There was a mistake with one of the missiles. It was supposed to hold in manual flight, but it switched to active guidance.'

'You expect me to believe that? Right after we disable the station for you, you knock us out.'

'I promise you, this was not intentional. Why would we attack with only one missile?'

'The missile hit their primary power train; they've got no power and no life support. They're going to need to dock at the station in order to stabilise the system. I will call back in twenty minutes.'

The call clicked off.

'He's lying,' said Belyakov. 'They're using this as an excuse to take the station before we can arrive.'

'An excuse? One of your heavy missiles hit their fucking ship.'

'I need some fucking air. I'm tired of this fucking room and these fucking soldiers.'

She strode from the room, her bodyguards following.

⌘

Belyakov was tired. They all were.

'You don't think it's convenient?'

A report came in.

'So did the missile hit?'

Belyakov was embarrassed. 'What does it matter? The Americans are closing in to take the bomb. That's reality. And if we don't do something, they will have control of it.'

They were all very afraid.

'Khrushcheva is dealing with it.'

'She's the one who allowed the US to get close to the base. She's done nothing but give concessions. It's like she wants them to have it.'

'What would you do?'

'We need to stop them from getting that bomb.'

'What can we do?'

'The deputy can raise a vote of no confidence.'

Belyakov glanced again at the report.

'She's almost at term limit anyway.'

'We'd make sure power passed to you. I will take full responsibility for everything.'

'We need the full committee for that. They would have to phone in.'

'You don't think they would vote with us? We can make sure that the police and space force are with you. Then we could have the vote later.'

'Yes, I suppose they would consider this best.'

The State Security chief looked around. 'Then we proceed?'



Khrushcheva went to return. She had just about smoothed things over.

She marched down the ornate corridors, out the door, and into the internal quad. The rain had stopped, but the clouds still stood tall and ominous. The morning sky was red.

She took some deep breaths, then turned about to go back inside. To her two soldiers had appeared. They surprised and overcame the bodyguards.

She instantly knew what was happening.

'There's an emergency,' the officer said. 'Our protocol is to escort you to the safe room.'

The bodyguards' hands went to their hips, but the police raised their rifles at them.

'This way, please, Comrade First Secretary.'

She was led on her own to a safe room. This was Belyakov's doing.



The Deputy sat. The room was in hushed silence, all staring at the table before them.

This was the second time that Sokolov had screwed them.

A soldier entered, approaching him. He spoke to the General.

'It's done, Comrade General Secretary,' he declared.

But he did not have time to register his new, much-improved position.

A voice came over the intercom, reporting that *Admiral Nakhimov* was on the line and awaiting instructions. The Deputy adjusted in his chair. For a moment he found himself hesitating.

He looked timidly at the others. Then he nodded.

Nakhimov leant into the connection. 'Launch all remaining Spearfish, fully armed. Destroy that American ship.'

## 30 Occupation

Makarov and Vogel ran into Pavlov and the engineers. They were engaged in damage control of the station.

They knew the missiles had been launched.

The children had been evacuated on the shuttle.

An overpowering radio signal sounded through their headsets. 'Crew of the Martyrs of Córdoba, we are commencing docking operations with your station. Any attack on this ship will be met with deadly force.'

They assembled at the dock, where there was no gravity, watching as the war-ship closed the last hundred metres. The guns were pointed at them.

It made contact, its magnetic couples latching labouredly onto the hull. A gangway extended to the airlock and the door was swung open. Around the door appeared a submachinegun, followed by a cautious-looking officer, wearing an oxygen mask.

'Everyone, place your hands upon your heads!' he called in accented Russian. The assembled party followed the instruction. 'Where is Alexi Sokolov?'

'He's not here,' shouted Pavlov.

'Where is he?'

'Somewhere in the ring section.'

'So he's alive?'

'Aye. He's alive.'

The officer reported into his lapel. Then he stepped from the gangway, several more armed sailors following. They formed a cordon, hemming those on the dockside into a huddle.

Following a report on the radio, the ship began to be unloaded. Wounded and equipment were floated out, the smell of burning accompanying them.

'Where is your medical bay?' asked a senior officer.

'It's this way.'

'Lead us to your secondary control room.'

They and Pavlov led them to the bay. The rest of the base personnel assembled in the hotel area, where they were held on one of the floors. An order went out for all personnel to report to the hotel. Anyone else would be assumed to be working with Sokolov and shot on sight.

Several armed sailors watched over them from by the entrance.

The captain and lieutenants arrived. Several soldiers wheeled command and communication equipment with them, setting it up in the next room.

Makarov went to them, telling them that Sokolov had killed Vogel.

A sailor appeared, looking around the room.

'Do any of you know the location of Nina Vogel?' she asked.

Nobody responded, looking at the ground.

'She's dead,' said Makarov. The officer turned to him. 'Sokolov killed her.'

The specialist looked once again around the room, then nodded, retreating.



Sokolov watched as the ship was detached and set adrift. Its manoeuvring rockets carried it slowly away.

The Americans were clearly having to use the station internal network. 'We've searched the bow section. Sokolov is gone and there's no sign of the records of the plans.'

'Search the rest of the station,' came the voice of the captain. 'Find him. We have six hours until Nakhimov arrives.'

The fleet had put to space. Hostilities had started. He should have known better than to doubt the frailty of human resolve. They had tried to double-cross him. But fate had intervened. He had been right to put his faith into the Grand Architect.

'Miss Vogel is deceased, according to the staff here. Killed by Sokolov.'

That was very clever of them. If the Soviets found out that the US had captured Vogel alive, as they surely now had, then they might well attack.

They had bought some time.

But still, the battle was coming. The distant glint of the Nakhimov showed against the black.

He would wait until the opportune moment, then would transmit the plans to both sides. That would push things over the edge.

He heard an American voice.

## 31 Espatier Assault

They use razor wire.

Leclerc and five others waited in the evacuated corridor. Leclerc checked her rocket launcher for what felt like the twentieth time. She fingered the safety latch, re-reading the instruction sticker on the side.

A view of Admiral Nakhimov was being fed to their helmet displays from a camera outside. Settling back, Leclerc refocused on the image. The ship was a motionless grey triangle, pointed directly into the sun.

He had first arrived two hours earlier, immediately bombarding all communications and observation equipment, scattering them into space to join the wrecked remains of Mackenzie. He had then released two dozen combat drones, which surrounded the station, watching for any sign of movement.

As Leclerc watched, the bright blurry circle of one of these crept silently across the frame. Any moment and they could have a missile dropped on them.

There could be no winning this in this situation. The most they could do was buy time. Fortunately, the Soviets had taken a while to organise their attack. But there could hardly be much longer left.

Two minutes later, the still was broken.

Halfway along Nakhimov, a hanger door swung abruptly open, exposing a bright interior. Slowly, three transfer craft were released. Each accelerated towards the station, forming an equilateral triangle between them.

'Landing Ops have been initiated,' said the radio. 'All defending sections, prepare to adopt firing positions.'

Leclerc waited, fingers tight on her handhold.

'Go!'

The three pairs raced forward, then separated, each moving to their pre-designated positions. They moved through office areas. The outer layers of the dock area had been entirely depressurised.

'Right here,' said the lieutenant who was Leclerc's fighting buddy, indicating one of the shuttered windows. He pressed onto it a block of breaching charge. Leclerc took up position behind a filing cabinet, making sure the velcro on her suit was attached. She raised the rocket launcher to her shoulder. '3-Unit in place,' reported the lieutenant, retreating behind his own cover, detonator in hand.

The other units confirmed one by one.

'All units in place,' the coordinator confirmed. 'Make ready to fire in ten seconds.' Leclerc waited. She realised she was not breathing.

'Three, two, one.'

The lieutenant detonated the charge. Leclerc raised herself from her cover. Time seemed to slow down as she levelled the launcher at the empty window, looking down its sights. Outside, the three bright dots hung in formation. A high-pitched tone in her helmet announced the munition had achieved lock.

She pulled the trigger.

There was a loud whumph and she was jerked forward, the space seeming to press itself around her. She did not wait to see the rocket motor ignite; instantly she was up and moving. At the edge of her vision, she saw the flash of the five missiles burning their way towards the invaders. More flashes indicated the transfer craft were deploying flares.

Then they were out of the room and throwing themselves down the corridor. They had just reached the top of the stairs when a missile arrived behind them, sending a piston of gas down the passage. The metal around them reverberated as Leclerc held on. They descended as fast as they could.

'Salvo ineffectual,' the coordinator grunted through gritted teeth as they reached the first landing. The camera feed now showed a glittering haze around the three boats, which were getting larger by the second. Nakhimov had managed to take out two of the missiles with its laser; the rest had missed, fooled by the counter-measures which had been released.

They still had another missile.

'Permission to take a second shot,' requested the lieutenant.

'Granted. Units 2, 3, and 4, move to backup firing positions. Estimated three minutes until troop deployment.'

Before Leclerc had time to think, they were heading back up the stairs. They raced in a different direction, entering what appeared to be a bar area. The lieutenant took out his own disposable munition, while Leclerc wired another of the

windows for detonation.

Finishing, she took cover in an alcove, her finger on the trigger to the detonator. The lieutenant raised the launcher to his shoulder.

'All teams in position,' confirmed the coordinator. 'Prepare to fire in ten. Five, four—'

Leclerc did not hear the rest. A flash engulfed the far side of the room, concussion ripping into her. She screamed as she was hurled sideways, grasping for purchase. Shrapnel bit into the material around her, splintering boards.

'Fire!'

She pulled herself into a ball, waiting in darkness for the white-hot stab of some ricocheting piece of metal to stab into her.

She had neglected to shut off the external camera feed. Three missiles shot out, again heading for their targets. Two disappeared into the red-lit puffs of smoke, revealing the beam of the warship, while the third missed. No sooner had it detonated when the three craft fired their retro-rockets, stopping and heading away from the station. In their place was a scattering of white shapes. One by one, these disappeared as they entered the shadow of the great disk.

Leclerc waited for several more seconds without feeling her suit be pierced. Then, knowing that the average energy of the shrapnel would by now have dropped, she slowly unfurled and dared a look over the cabinet. The room was still abuzz with spinning fragments of metal and glass. The lieutenant was down, blood coming from his side.

'Unit 2, what's your status?'

'Missile landed near us.'

Somehow, one of the drones must have detected their movement through the metal. On the far side of the room, a gaping hole looked out into the bright lights of the dock area of the station. She had been lucky: the cabinet had mostly shielded her from the explosion.

'Callendar is hit. I'm going to move to his position.'

She got up, watching for any large spinning fragments which might still have the inertial to cut her suit. Then, making sure to stay out of sight of the opening, she hurried to the lieutenant.

Fragments had pierced all up his right leg and his abdomen. The exposed blood had frozen in the vacuum. She checked for any larger breaches which might pose more of a danger. One had hit his side. But the suit indicated he had not lost

much blood and his vitals were okay. Lucky bastard, she thought. Still, he needed immediate medical attention.

As she examined him, he stirred. 'How do you feel?'

'I'm okay,' he said. 'My leg's fucked but I can move.'

'Alright.' She slung his rocket launcher over her shoulder.

She jumped as something passed close by the gash in the hull, thinking it was a drone. But it was just a decoy: an inflated tube the size of a man. It bounced off the hull and back into space. Out past it, the espatiers were arriving at the station. A squad of six approached and deployed their rocket-propelled breaching tethers, coming almost to a stop as they reached the hull. Then they crumpled onto it, making contact with their magnetic latches.

'I have eyes on espatiers,' she reported. 'Six of them. They're at the southern dock.'

'Hold them where they are.'

'You go,' she said to the lieutenant. He went.

Leclerc was conscious that she was incredibly exposed. But any missile hitting her position would endanger the invading force. What she had to watch out for was Nakhimov's laser.

Leclerc reached back for her personal weapon. It was an MPX carbine, fitted for vacuum operations. A black heat sink was slotted over the barrel. She hadn't fired one since their boarding operations exam. She recalled that she had died.

The espatiers wasted no time organising themselves and identifying a window. One of them began producing a line of breaching charge.

Leclerc wedged herself into a gap between two cabinets which had been wrenched sideways in the explosion, forming a makeshift barricade. She brought up the weapon, closing one eye. Her HUD automatically switched to the carbine's in-built sighting camera. She trained it on the distant figure. As he went to set down the charge, she fired.

The bullet missed. Immediately the figures laid flat, pressing themselves against the surface, searching for the space her.

She fired another two rounds, both again impacting the metal around them. Then one of them saw her. He brought up his machine pistol and launched a burst at her. Leclerc winced as the metal in front of her was beaten.

The rest had now taken cover, taking the breaching charge with them. They began to return fire. Bullets whipped silently past Leclerc into the room, breaking

glass, smashing furniture.

'Taking heavy fire,' she announced. She kept firing, hitting one of them.

'Keep them there. 3 and 4 Sections are almost in position.'

Leclerc grimaced. She kept firing.

Soon, a series of flashes issued from further down the station. This was followed by the haze of gunfire. More bullets could be seen ricocheting from around the espatiers.

They were pinned down for the moment. But they were returning heavy fire on the defenders.

'Be advised, a second squad of espatiers had entered the station from the north side,' the radio reported.

Most of the shooting in Leclerc's direction had now stopped. She considered the situation. They would only be able to hold this squad there for so long.

She felt for the rocket launcher. It had a one-kilogram high explosive warhead. Detonated from above, this would be of limited effect on their mechanised exoskeletons. But from below, it might be able to evict the entire squad. She came to a decision.

'Permission to perform explosive assault,' she asked. The coordinator was clearly too occupied to confirm.

She thrust herself from her position, heading down the corridor. She watched out for any sign of the second squad of espatiers. Following the passage around, she descended until she was inside the level beneath the squad outside.

She had worked out that they were over the storage units. Coming to the door, she checked through the window, and then slid it open. The space was dark. Moving through it, she searched the ceiling above her with her spotlight. Then she found it: the base of the antenna. This was where the espatiers had settled themselves.

She reached for the rocket launcher, thinking about how much plastic explosive would be enough to set off the main charge. Then she froze. The white O of the spotlight had fallen on an alien-looking object. A black tube, projecting down from the ceiling. The metal at its base was rough and jagged.

Leclerc knew what it was. Very slowly, she began to back out of the room, attempting to retrace her path without turning to look. She kept her head fixed on the way ahead. Then, out of the darkness floated one of the objects she was afraid of: a black, pencil-size object. It continued to float, inert, slowly tumbling.

She crept back, praying that it would not see her.

Very carefully, she heaved the door shut. They were going to need to find another way.

She found the main squad still laying down fire as she joined them. They were crowded around several burst windows, firing along at the espatiers' position. They had managed to kill three of them. But the espatiers had managed to move up into better cover, advancing on the position. They were now laying down fire on the defenders.

'Bulkhead door opened at E27,' murmured the radio. 'Expect contact from the second squad in the next few minutes.'

'Leclerc,' ordered the commander, 'help cover our northern approach.' She and two other astronauts spread themselves around the large room they were in, training their weapons on the catwalk at the far side. She hid behind a metal storage crate.

The first sign of the invaders was a blinding flash. A spray of bullets hit around them. Leclerc saw a white shape dart from one entrance, a second from another. She tried to follow it with her rifle, firing. But to no effect.

'Fall back!'

They retreated back down the corridor, firing after them. They were forced away from the windows and around the curve of the corridor.

An espatier appeared at the far end, firing a long burst. Leclerc pressed herself against the wall. The remainder of the squad piled into an enclosed side room. The door on the far side was locked. 'We need to get through that door.'

Leclerc began cutting through.

The others trained their weapons on the door. A shadow passed over it. Why weren't they throwing in their grenades?

Then a terrible thought occurred to her.

They had been chased around the curve of the station, onto the side facing Admiral Nakhimov.

No sooner had the idea formed, when a notable creaking travelled through the metal around her and into her palms. An orange light began to fill the room, turning rapidly red.

'The laser!' she screamed.

31 *Espatier Assault*

She just had time to bring down her welding visor before light filled the entire room. Heat shone in through her face plate. Her entire world became white.

She turned, continuing to work on the door. But it was no good.

The beam crept through the space. It passed over a liquid tank. A fragment bounced off the ceiling above her, then penetrated her suit.

## 32 Last Call

[The assault ships use explosive welding]

Makarov listened to the radio. The outer defenders had been overrun, all killed or captured. The station now had its space defences suppressed. The Red Fleet had then returned in their two transfer craft, this time their holds filled with marines. These had landed and deployed their breaching modules: large tent-like structures which could be pressurised, allowing new airlocks to be emplaced on the outer hull. This permitted them entry into the pressurised area.

The defenders on the inside were doing the best they could. But they did not know where the next entry was going to take place. They were being pushed back by the infantry assault, which was using flamethrowers.

'We're being outflanked.'

The voice of the coordinator issued from the next room in response, apparently trying to remain calm.

The US forces were using acoustic Doppler transmission through the wall.

'We're trying to hold them at the primary spin junction.'

Makarov considered the situation. There was no way to win. If either side found the plans, the other would declare war. If the Americans found Sokolov, they would get the plans. But if they were overrun, abandoning the area Sokolov was in, then the US would attack.

Makarov thought about the role he had played in all of this.

He tried to persuade them not to send the transmission.

### 33 Pipework

Khrushcheva was in a small disused bedroom. The two soldiers were in the room, watching her. One stood by the door; the other sat on the cream-embroidered sofa across from her. The two bodyguards were bound and tied but she was not. They seemed unable to bring themselves to.

She looked around. She had never been in this part of the Kremlin before. They had gone up two floors, and then along. The curtain was drawn. The wallpaper was cream. She calculated that she was two floors up from the Eastern guard house.

She wondered what was happening outside. The sound of rocket planes boosting into orbit regularly pierced the morning quiet. Echoing over the city came ever-present, overlapping thumps of heavy military helicopters. Vertical contrails of various levels of freshness lifted up from the direction of the military cosmodrome. Most likely they were transport vessels.

'I suppose it's no good telling you that right now you are responsible for dragging us into the largest war in the history of humanity.'

The officer did not respond.

She went to get to her feet.

'Please stay seated, ma'me.'

'I've been sitting here for five fucking hours. My fucking knees hurt. If you want to me to stay there you'll have to shoot me. I need to use the toilet anyway.'

One of the soldiers accompanied her to the door.

'You coming in?'

She went to the bathroom, being left alone.

She used the tap. Once again, the water pressure was low.

She heard a distant screeching coming through the pipe. She had an idea. The pipes here were all connected. She could try to put through a signal.

Khrushcheva twisted the tap multiple times. She just had to hope that one of the guards was going to the toilet.

The guard tried to come in.

33 *Pipework*

A commotion sounded from outside. There was shouting of many voices. The soldiers holding her surrendered as the guards entered to help her.

'Take me to a telephone.'

She was taken down to the guard house.

'This is General Secretary Khrushcheva. Clearance code: 8Y3 FF6. Put me in contact with General Cevlowski of the 4th Interdiction Wing.'

## 34 Loose Ends

Sokolov moved through the corridors. He had killed an American, taking his oxygen and radio.

He came to a window. He did not look past, as he knew that drones would be watching.

The comms network told him that the Americans were retreating from the main section.

He extended an antenna, listening. Tuning in, he heard the sounds of war.

The time had surely come. He connected the radio circuit to the hard drive, preparing to broadcast on all frequencies.

Suddenly, the frantic American voices were replaced by one with a different accent. 'Calling all United States personnel. This is Captain Nikitin of the Soviet Space Forces. I am requesting contact with your commander.'

'This is Captain Birch. What is it?'

'Be advised, we are immediately ceasing all hostilities. I have received instructions to begin sharing all intelligence with you, including the firing codes, when we locate them. I am requesting that you send a contingent of senior officers to our command post to verify our compliance. You should shortly receive orders to this effect—'

Sokolov could listen to no more. He was disgusted. Yet again, his own side had lost its nerve. They were willing to lie down while the tides of history washed them away to nothing.

He shut down the antenna with a crack. Another five minutes and it would have been ready to broadcast. He had almost given his side the means to avoid its fate: for they would have shared the plans with the Americans.

He had been fortunate that they had chosen to show their hand.

No, not fortunate. He still had the vision of the Grand Architect on his side. This was far from over. The two sides had spilt each other's blood.

He simply needed to extend the situation somehow.



Khrushcheva spoke on the phone with Santoso. Belyakov had already ordered attacks on several US hunter-killer drones, believing that an attack on their hypersonic missile submarines was imminent. The US had responded by striking several orbital radar stations and bringing down one of the more remote laser stratospheric laser batteries Belyakov had not responded to calls from the White House.

The US had just launched a fleet towards Soviet geostationary space. 'I must ask that you call off your ships heading for our geostationary monitoring stations. Then we can attempt to defuse this situation.'

'Those ships have been boosted. I've been advised only have enough propellant to change course a limited number of times. If they cancel course, they will be deemed combat ineffective until they can be refuelled.'

'But I'm back in charge now. There is no danger of combat.'

'I cannot call them off until I know that we have a balance of power. I'm glad you're back, but the fact is that Belyakov has placed our nations in a very unstable position.'

'I told you, Eric. I have ordered our forces at the station to cease their attack and to collaborate with your personnel in their search for the plans.'

'Well, let me say that I very much hope they find them.'

Khrushchev listened to the tone. 'You think we already have the plans?'

'You have been out of action for hours now, while your forces have controlled most of the station. It would have been easy for someone to have got to Sokolov and got the plans out by now. Given that I don't know whether your side possesses the plans, I cannot permit my nation to be at any more of a disadvantage than it already is. If those monitoring arrays stand, that is a disadvantage.'

'I'm telling you: we don't have them.'

'Well, we have to find them then.'

'If those arrays fall, our missile defence will be crippled.'

'Find the plans, Teresa.'

The call ended.

'What should we do?'

'We can't risk being caught unprepared. Ready the fleet for combat.'

Khrushchev was dazed. They were still headed for oblivion.

'A report has come in. They say that a United States AstroPAD missile has been fired from the station out into empty space. It appears to be transmitting part of the plans uncoded. They think that the warhead has been replaced with a portable transmitter.'

'It's Sokolov. Can they use it to find him?'

'They're already moving to the source.'

↻

Sokolov watched the missile recede, winding to avoid laser defence. His radio played the partial plans. In time: a day, a month, they would tip back into conflict as they both attempted to recover it.

But that would only happen if there was no other way to recover them, he thought reluctantly. Else, the two sides could extract them together and de-escalate. He had already destroyed the copy he had carried. He wished there had been another way. But there was only one more thing left for him to do in this life.

↻

Makarov and Vogel remained imprisoned with the others. They watched the officers and escort depart for the Soviet lines. Others had already gone. The remainder maintained their cordon, guarding.

Makarov sat next to Vogel, staring into the distance as he listened.

The room was a long office, with dividers along it.

At the far end, from the corridor, appeared a figure in a grey US military space suit. As he walked, he looked searchingly towards the seated base personnel. Then he stopped, raising the assault rifle he was carrying. Too late, Makarov noticed the limp.

'Get down!' he yelled, dragging Vogel to the floor with him.

An instant later, the chair where she had been sitting exploded in foam and fabric.

The others ducked too, scattering under furniture. The two guards attempted to take cover, raising their own weapons. But they fell in a haze of red.

The scattered staff began to run or crawl from the room. But Makarov and Vogel were trapped in the corner. There was another door, but it was exposed. They did their best to crawl towards it.

Sokolov appeared over the top of the nearest sofa. Makarov braced himself as his head and shoulders appeared, the gun pointed at Vogel. There was nothing he could do.

Then there was a grunt and thud and he stumbled sideways, falling. Pavlov scuffled to his feet, a fire extinguisher in one of his hands.

Makarov scrambled to stand, going forward to help.

'Go!' shouted Pavlov.

Sokolov was on his back. Makarov just had time to see his hand go to his waist and pull his pistol, shooting Pavlov through the chest.

He turned and he and Vogel raced the several meters to the door, bursting through.

They were atop an outdoor set of stairs. They ran down, racing across the courtyard, crouching behind the terracotta-coloured plant pots.

Shots rang out from the top of the stairs, clay tiles shattering around them, revealing metal below.

They stopped at the rim of a fountain. The sun scorched down.

Several US sailors spotted them and began shooting.

They dashed across a clearing, following a hedgerow around the rim of the ring. Shots came in from a high angle.

Ahead of them was only clearing. They ducked inside and were in an equipment storage area. Old tractors and harvesters stood along one wall. Liquid tanks stood.

At the rear wall was an equipment elevator. It looked like it was barely used. Makarov looked back towards the sunlit entrance. They didn't have long.

Vogel tried the elevator and it worked. The diagram showed that it went straight to the port section. That would carry them into the Soviet forces. But if they remained here, they would be dead.

They got in and took it up. It was very slow. Makarov realised that Sokolov would be able to cut them off by taking one of the normal elevators. They would need to move fast on the other side.

It arrived and they got out, finding themselves in a wide arterial corridor. There was no sound. They moved in one direction. They heard the sound of a nearby elevator arriving ahead of them.

They doubled back. The walls were mostly bare pipes: this was the route to the cargo loading bay. The few maintenance side doors present were locked. As they reached the corner, the light changed behind them. A shot impacted the metal.

They raced down the corridor, turning another corner.

'Stop right there!' a voice shouted in Russian. Ahead of them, two men in Soviet pilot's uniforms hovered in the corridor, pistols raised towards them. Behind them was an airlock, through which could be seen the internals of one of the troop shuttles.

'Approach the airlock,' one ordered. They did so.

'Behind us,' Makarov tried to warn them past panting breaths.

'We have two individuals here in civilian uniforms.'

'Do not shoot them,' the radio ordered emphatically. '*We need Sokolov alive.*'

At that moment the guns left Makarov, pointing further down the corridor. He and Vogel rushed forward, pressing themselves into the side of the corridor. 'Stop ther—' shouted one pilot before a burst of automatic fire cut him down.

'Through there!'

Makarov and Vogel lunged forward, crossing the corridor and entering the airlock. Behind them, more shots rang out as the second pilot fell.

Pulling themselves through the brightly lit airlock passage, they found themselves inside the docked shuttle. It was dingy, brown and green netting lining a narrow passageway. It smelt musty.

They pulled their way inside, rounding a corner, and then reached the rear of the pressurised area of the shuttle. Propellant tanks bulged through the bulkhead. There were several small side rooms: toilets and kitchen areas. They made their way into the store.

They heard the distant sound of an airlock door slamming closed.

He looked desperately around him.

As he did, the air around them began to fill with a humming, accompanied by clunking sounds from behind them. Then there was a jolt and a series of whooshing sounds as the room seemed to spin around them.

## 35 Escape Velocity

Sokolov placed his thumbs on the control stick. He had been afront enough times during assault exercises to know how to direct a translational burn. He directed the nose of the craft towards Zod-Code 6: directly away from Earth. Then he pushed forward. Hard.

Behind him, there was a thin screech as the ullage thruster fired, followed a moment later by the main engines. He was thrown back in his seat, head pressed into its rest.

As the second passed, and the scene around them fell away, he waited for the blinding white of Nakhimov's laser to envelop them. But the space around him remained dark. He had assumed that the apparent attempt at escape would induce the Soviets to destroy the shuttle. That was a more certain path to success than searching it.

But it seemed they were to be allowed to live.

An activating glance at the radio confirmed this: 'Hold your fire!' ordered the common band, suddenly filling the bridge. 'We have information that Sokolov is aboard.'

The rockets continued to fire for several more seconds, before automatically shutting off. They were out of propellant.

Behind them, several drones were putting out from Nakhimov, following behind. At the speeds they were travelling, though, it would take several days for them to arrive.

He examined the radar monitor. One sector of the screen was totally greened out, the sensor apparently being overloaded. The direction was Earth. He adjusted the gain and saw that the source was combat radar jamming. But it was not directed at him; it was coming from GEO-63, where the Soviet geostationary space assets were concentrated. That amount and type of jamming could only mean that a missile battle was underway.

Focusing in the sensor array, the display resolved the United States main fleet headed directly for the GEO-63 squadron.

He realised that he had made an assumption. Once again, he had overestimated his opponents. They may have been able to establish cooperation in this small part of the world, but everywhere else, the wheels were already turning. He had not needed to launch that missile. But no matter. Only fools worked in half measures.

As he waited for his fate, he began flicking through other radio channels.

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Makarov and Vogel recovered from the acceleration. He looked about. Then he saw in one of the equipment racks: an assault rifle. He pulled it out, freeing it of the constraining netting. As quietly as possible, he checked and inserted one of the magazines, then cocked the weapon.

Vogel held a knife.

'Hang back. Be ready to finish him off.'

He made his way back towards the corridor. Weapon raised, he moved silently forward, covering the way ahead.

He found Sokolov on the bridge.

'Don't move!' he commanded.

Sokolov was still. 'You might as well finish it. It's over. There's nothing that any of us can do.'

Makarov moved around to be in front.

The radio played the BBC World Service. 'They've started to bomb our submarines; there's aerial combat on the moon.'

Makarov thought about whether to do it.

Sokolov looked at him. His eyes wandered. Then they stopped, hanging on an equipment cage. His gaze froze and his body seemed to tense. He looked as if he realised he had made a mistake.

Makarov did not have time to look. In an instant, the once-colonel was moving, his hand going to the pistol on the velcro before him. Makarov did not think. He pulled the trigger twice and Sokolov rocked back, falling away from the terminal towards the window.

Makarov rushed forward, snatching away the weapons. He eyed Sokolov, who was not moving.

He looked at the terminal, seeing that they were heading deep into interplanetary space.

'Nina, it's safe!'

Vogel arrived.

Sokolov lay by the window, one hand had been holding himself steady. Makarov went to him with the medical kit. The reports of war played on the radio.

As he turned him around, the face revealed was mortified.

Sokolov looked at him. He couldn't speak. He seemed distraught. He looked to this spot on the equipment cages. Then his eyes turned imploringly back to Makarov.

Then he died.

Makarov went to the equipment cage. The object visible at the front was a memory retrieval kit.

He took it out.

'They have one of those?' said Vogel.

'This is what made him try to kill me.'

Sokolov must have thought that using them would stop his plan.

'What if that makes it worse?'

'He didn't think so.'

## 36 The Balance of Power

Khrushcheva hung up the phone to Santoso. The Americans had verified the weapon plans. The Soviet scientists were doing the same: the initial report was that it seemed to be an effective Rangappa solution, the simulations indicated.

The US fleet had turned aside. Fighting had ceased elsewhere.

They had actually done it. They had avoided war.

'Order the interdiction wings back to their bases.'

'What about the shuttle that sent the message?'

The message accompanying the full firing solution had informed them that Sokolov was dead. There were two members of the base staff aboard.

'What would it take to bring them back?'

The officer did not look optimistic. If they deployed a crew-carrying shuttle now, it might be able to recover them in several months. But a journey that long in such a small craft would be risky. They might well lose both rescuers and rescuees to radiation before returning.

Khrushchev considered ruefully. Enough people had already pointlessly died today, without her risking any more.

'Let them go,' she said dully.

## 37 OSFS Greenriver: Ship's Log

They rescued them in defiance of the Soviets.

The OSFS Calcutta departed port in lunar orbit Thursday 10th of November, 2101. Boosting had fortunately not affected by the ongoing Terrestrial political situation.

No sooner had the burn ceased, when a bulletin was received from the International Directorate of Shipping. Their path was going to come close to intercepting a stricken craft carrying two civilians at close to their velocity vector. There was a formal request for rescue on that craft.

The captain and officers debated. They were under no obligation to perform such a rescue: it would use precious fuel and risk one of their two shuttle-craft. It would also mean bringing them to Makemake.

But the chances of any other ship coming closer before it was too late were essentially zero. Thus, if they did not act, the two castaways would die.

They decided to rescue them.

They deployed their lifeboat.

## Epilogue

Makarov and Vogel sat in the canteen with the crew around them.

The colonists had been reluctant to let them come. They were stern but respectful.

They were about to be put into deep hibernation. This meal would last them for two years.

The journey was twenty years.

Makarov was reading about the agricultural methods used. There were several places they could go. There was a project to explore the inner ridge. Vogel read about the new reactor they were trying to construct.

They looked out at the star-filled sky. Makarov thought about the devastation that he had almost helped cause. Behind them was all that; they had no choice but to leave it behind.

The Soviet Union had asked Vogel to make a full report. She had cooperated. But there was no retrieving her now. By the time they woke up, they would already have discovered everything.

There, ahead of them, was the world.

THE END