

A NEW ORDER OF THINGS: CONCLUSION by Edward M. Lerner

Major catastrophes leave indelible marks on those they touch, but the form of those marks ... depends.

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Illustrated by John Allemand

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Synopsis

For a century and a half, a growing interstellar community has maintained radio contact. A vigorous commerce in intellectual property has accelerated the technical progress of all its members. Travel between the stars seems impossible, but InterstellarNet thrives using an elegant alternative: artificially intelligent surrogates who act as local representatives for distant societies. Quarantine procedures strictly govern the delivery and operational environment of each alien agent, protecting agents and their host networks from subversion by the other.

A radio message shatters this comfortable status quo. The signal comes from a habitat-sized decelerating interstellar vessel, its unannounced trip from Barnard's Star now ninety-nine percent complete. Citing damage en route and low supplies, the starship Victorious goes to Jupiter rather than Earth. The starship's crew are whippet-thin, iridescent-scaled, bipedal carnivores who call themselves Hunters. Humans refer to them as K'vithians, after their home world of K'vith, or, informally, as Snakes (because Barnard's Star lies in the constellation Ophiuchus, the Serpent Holder).

*Not only humans are surprised by Victorious' short-notice arrival. **Pashwah**, the AI trade agent on Earth for the Hunters, is also taken unawares. So are her internal sub-agents, the representatives of the Great Clans. Pashwah rejects unauthenticated demands from the starship for Great Clan InterstellarNet credits with which to buy supplies, but does transmit to Victorious a translator and human-affairs advisor: a partial copy of herself named **Pashwah-qith**.*

*Ambassador **Hong-yeo Chung** heads the United Planets response team, assembled on Callisto. His technical support team includes theoretical physicist **Eva Gutierrez**, xeno-sociologist **Keizo Matsunaga**, and Interstellar Commerce Union executive and systems engineer (and long-time claustrophobe) **Arthur Walsh**.*

Most humans have forgotten, or at least forgiven, a half-century-earlier inter-species crisis. Art is not among them. The "Snake Subterfuge" involved a

trapdoor hidden in licensed Snake biocomputer technology, potentially compromising most human infrastructure. That crisis ended when Pashwah was convinced that one corporation's extortion plans must not destroy overall inter-species relations. The biocomputer vulnerability has long been removed.

*Antimatter is extremely dangerous stuff. The United Planets antimatter production facility—built to stockpile fuel for a nascent interstellar-drive research project—remains top secret, undisclosed, and hidden on Jupiter's distant moon Himalia. Unbeknownst to the UP, patient data mining over decades has revealed Himalia base's secret to both Pashwah and **T'bck Fwa**, the AI trade agent on Earth for the intelligent species native to Alpha Centauri A.*

There is a conspiracy at hand, and it involves T'bck Fwa's patrons: the Unity. Twenty years earlier, the Unity's prototype starship, then named Harmony, was boarded and captured on its final approach to Barnard's Star. Harmony's rightful crew awoke from suspended animation into K'vithian captivity. Members of the Unity, whom humans call the Centaurs, are herbivorous, green-furred, land octopi.

***K'choi Gwu**, Harmony's ka, or leader by consensus, surreptitiously sabotages the shipboard environmental systems. She knows that only a fresh supply of home-world biochemicals can avert eco-collapse. Reconfiguration of human chemical plants to mass-synthesize the exotic materials will surely be expensive. It's a ruse to justify her feigned reluctant disclosure of a fortune in InterstellarNet credits hidden deep within the suppressed shipboard AI. Gwu's captors believe they reactivated the lobotomized AI just long enough to retrieve the hidden financial codes, but **T'bck Ra** successfully hides himself in computers distributed across the starship. An attempted SOS transmission to T'bck Fwa on Earth is interrupted before it is completed.*

T'bck Fwa already suspects a human/K'vithian conspiracy. His suspicions grow when he finds biochemicals appropriate for the biosphere of a Unity habitat being delivered to the Jupiter system. The SOS message fragment from the starship seems to confirm all his suspicions.

***Firh Mashkith**, Foremost of clan Arblen Ems and the starship he has renamed Victorious, has more pressing matters on his mind than a declining ecosystem. Arblen Ems, once a Great Clan, and hence privy to Pashwah's long-ago discovery of the antimatter program at Himalia, had overreached politically. All other clans had united against them. His people were driven to the fringes of their solar system and hunted to the brink of extinction. Then, twenty years ago, a starship had emerged from the outer darkness. It embodied technology—antimatter and interstellar drive—far beyond the capabilities of any clan. But Arblen Ems had become too weak to protect its prize....*

Mashkith's boldness has changed all that. The interstellar drive, however esoteric in theory, is easy to reproduce. His problem was and remains fuel. The captured starship carried antimatter for a round trip; the antimatter intended for the return flight has instead been used to reach human space. He has already sent a rigged lifeboat back toward Alpha Centauri. The lifeboat radioed a contrived distress call and then self-destructed, to disguise the piracy and make the Unity distrust their own technology. If he can now trick the humans into disclosing how they handle antimatter on very large scales, Arblen Ems alone will have access to the stars.

Art and Eva have both worked in the secret labs on Himalia, so the K'vithian rationale for picking Jupiter as their destination rings false. Still, a demo using a sample of antimatter from the starship's reserves convinces them that K'vith must already have antimatter technology. The demo, like the large patch on the ship's side, supports Mashkith's assertion of an en route accident that destroyed his antimatter-production equipment. Without human-supplied antimatter, Mashkith tells the UP, Victorious is stranded.

*Mashkith's senior officers, **Rashk Keffah** and **Rashk Lothwer**, disparage human antimatter technology. After detailed interviewing of UP experts, the K'vithian engineers declare themselves reluctantly convinced: "Primitive" human techniques can safely transfer to Victorious large amounts of antimatter. In practice, they have tricked the UP into disclosing all the clan needs to know to produce and manipulate antimatter on a grand scale.*

*After a second contrived demo, this time of a lifeboat left pre-positioned in the Kuiper Belt, the UP agrees to swap a load of antimatter for the lifeboat and its interstellar drive. Victorious is refueled from the UP stockpile on Himalia. Chung, Eva, and media star **Corinne Elman** are among the humans then given a ceremonial orientation cruise when the bartered lifeboat is transferred.*

The UP antimatter facility explodes catastrophically, killing thousands, much as Snake engineers had warned. The blast shatters Himalia, cripples the naval fleet guarding the no-longer-secret facility—and destroys the returning lifeboat filled with human scientists and dignitaries.

*Art's friend **Helmut Schiller** has a shadowed past: As **Willem Vanderkellen**, he made a major mineral find in the Belt, only to fall afoul of a claim-jumping criminal syndicate. Under his assumed name, Helmut works as a pilot for Corinne. Long years hiding from the mob has honed skills in sensing danger and deceit. He and Art work out how a Snake lifeboat caused the Himalia disaster—and that it was not the lifeboat that their friends boarded. That ship, with Himalia's top scientists presumably held prisoner, is seen creeping away, far above the ecliptic.*

Pashwah-qith has flooded the black market with Centaur credits, using the

proceeds to re-supply Victorious. The unexpected surge in Centaur credits flowing into the banking system provides a critical clue how to reconsider past anomalies. Art deduces Victorious must be a hijacked Centaur starship—

But what can the UP do about any of this? The Himalia disaster has destroyed or disabled most human naval resources in the Jovian system. Arblen Ems warships that sortie from Victorious rout the few remaining UP forces. The starship recovers its escaped lifeboat, now free from human pursuit, and rigs for another interstellar voyage. Mashkith is exultant. He now controls the secrets of the starship drive and antimatter production, and prisoners who are expert in both.

Mashkith locks his human captives into the agriculture sector of the starship with the Centaur crew. Corinne and Eva immediately begin conspiring to steal and escape aboard a lifeboat.

*As Victorious recedes into the interstellar darkness, Art, Helmut, and UP intelligence agent **Carlos Montoya** approach the UP Navy with a desperate plan....*

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CHAPTER 36

Two gees got old quickly, even two scant K’vithian gees. Helmut’s “co-pilot” squirmed in his acceleration couch, tugging a wrinkle out of his shirt even as, sure as cosmic rays and taxes, some new crease formed to press against his sore back. “Are we there yet?”

Helmut tweaked his sensors before answering. “Art, that’s gotten about as old as, ‘You’re sure this is going to work?’ The answer is also the same. No. Ask again, and you can ride in back.”

The display imaging their hastily retrofitted payload bay showed Carlos’ UPIA special-ops team hard at work despite the ship’s acceleration: stripping and reassembling weapons, checking out comm gear, packing ammo, while their officers studied and mapped every surmise and scrap of data ever collected about *Victorious*. They had launched with little notice from Callisto to fly the suicide mission he and Art had pitched. Anyone who considered two gees troublesome kept that frailty to himself. Helmut guessed his passengers would be far less tolerant of Art’s nervous kvetching than he.

Fifteen minutes passed before Helmut broke the silence. “We’re well past halfway there, if that helps.” Another stretch of quiet. “Okay, I admit it. My nerves are pretty well shot, too. This is far too long to spend feeling like we’re wearing a bull’s-eye.”

Within the main holo into which Art obsessively stared, *Victorious* was a hot fusion flame amid a vastness of nothing. The last Snake support ships had all easily overtaken the starship and docked days ago. “What are they thinking?”

“They’re delighted to see us. We’re comrades in arms, returned against all odds after a near-death experience at the hands of the evil but inept humans.”

The trick was in sustaining that false belief.

Both Snake losses in the recent combat were self-refueling: scoopers. Skimming a gas giant for fuel was pretty simple in concept; the physics of streamlining meant all scoopships looked much alike. *This* scoopship had had its fusion reactor detuned, so that it ran at the cooler-than-human-norm Snake level. Cosmetic scorch marks discolored their hull, with intent to simulate battle damage. That assumed they got near enough for a close inspection.

The special magic—and the rescue mission’s only hope—lay in the nuller, by comparison with which Helmut’s long-ago black-market model was so much regolith and duct tape. The UPIA version was customizable; more than merely canceling the ship’s true lidar and radar echoes, it emitted false echoes to mimic another ship. The navy had had plenty of radar images of unstealthed Snake ships to work from, data captured in the epoch before Himalia.

The periodic hails from *Victorious* continued, and Helmut continued to ignore them. Mashkith was obviously convinced *Deep Throat* was a Snake ship whose comm capability had been knocked out. Obviously—because no squadron had been launched to take them out. The Snake warships did three gees without difficulty, even though the starship evidently couldn’t.

Helmut ground his teeth all the way to the flip-over point. Now, until they doused their fusion drive on final approach, *Victorious* could see little but their hot, but not too hot, exhaust.

And if he could get them just a *bit* closer than that, the special-ops folks in the back would get their opportunity.

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Steal a lifeboat. It was a great concept, Eva thought, but somewhat sketchy on details to constitute a plan. Not that she had anything better to offer....

The starship’s acceleration was oppressive, far higher than the Callistan gravity to which she had become accustomed, but at the same time familiarly almost Earthly. A field, or orchard, or vineyard spread all around her, worked by dozens of Centaurs. They might have been unobtrusively observing her, or doing necessary

agricultural maintenance, or following some gardening muse. Perhaps they did all three?

None of this is getting me any smarter about Centaur lifeboats.

The only discernable differences between Centaurs were in height and subtle green-on-green fur patterns. She distrusted her ability to tell them apart. “Joe,” she queried. “Which one is their leader?” A bright translucent disk flashed in her mind’s eye, superimposed over one of the toilers in the field, with a pop-up label that read: K’choi Gwu ka. Evidently Centaurs were not very status-conscious. Art would know. Would she ever see him again? The emotion roiling beneath that question threatened to paralyze her, and Eva tamped it down. “Thanks.”

The ground was sodden. Her shoes squelched as she meandered to the Centaur leader. “I appreciate your hospitality, K’Choi Gwu ka.”

“‘Gwu’ is sufficient.” The Centaur straightened from her task, patching the eroded bank of a stream or irrigation channel. “We have little with which to be hospitable.”

“All the more reason to appreciate your generosity.” Could I sound any more stilted? Maybe it didn’t matter, given two translations before Gwu had a chance to assess her words. “Perhaps in time we humans can help.”

“Perhaps.”

Steal a lifeboat. If it could be done, why had the Centaurs not done it? “All these years, you’ve been prisoners aboard your own ship. It must have been terrible.”

A weird wave traveled from the tips of Gwu’s tentacles to her torso, and reflected. “I do not recommend the experience.”

Eva prodded the moist soil with the tip of one muddy shoe. “How did you deal with it?”

“Long ago, I studied humans. Do you know Nietzsche? ‘That which does not kill us makes us stronger.’ A horrible concept with an element of truth.” Her tentacles repeated that strange back-and-forth ripple. “I despair at how strong the crew-kindred has become.” And she shared a little of that experience....

The enormity of the Centaurs’ suffering overcame Eva. Her selfish prying dissolved into sympathy, her sympathy into empathetic horror.

Reliving the past was far harder on Gwu. Abuse and privation were mere hardships to be endured. Worse was the remorse that gnawed at her: for the lives

lost in futile resistance, the dreams unfulfilled, the children foregone, and the lost opportunity to make a difference.

Eva found herself enfolded in Gwu's arms—tentacles had become too impersonal a term—and Gwu in hers. Both were shaking. Captivity, misery, and futility stretched before them all.

It struck Eva she had, in fact, discovered something of vital importance: her resolve. No matter the cost, they—humans and Centaurs alike—*must* escape while human space remained within their reach.

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The bridge of *Victorious* had returned to normal, a place of confidence and purpose. The feeling was palpable. Mashkith was almost relaxed, for the first time in years. He would completely relax when the straggler caught up to them.

“Recommendation, Foremost. Sortie of inspection.” Lothwer had performed superbly on his recent mission—and he knew it. His suggestions, while polite, had become noticeably more assertive. More ... challenging?

“Review of available data,” Mashkith said.

“Respectfully, Foremost, data inconclusive. Opportunity for expanded knowledge.”

“Review of available data.” Mashkith put a trace of growl into the repeated order.

Lothwer took notice and summarized. The lone ship struggling to overtake them, to the extent it could be sensed, looked visually and on lidar like *Audacity*. The time and place of its emergence from behind Jupiter was consistent with a strategy of playing dead until it had drifted far from the human fleet. Its exhaust temperature was appropriate for a Hunter vessel. Its engine stuttered and surged, well below its rated capacity. It did not reply to hails.

It was on that last point Lothwer had fixated. “Identification a requirement of doctrine.”

Lecturing him on his own bridge about doctrine? One success does not make a Foremost. His aide needed a reminder of roles; perhaps some among the crew needed a reminder who protected them all. “Loss of *Courageous* in rescue of your mission,” Mashkith snapped. “Unknown but extensive damage and casualties on *Audacity* for the same purpose.” Your success was not without a high cost. “Maybe survivors unconscious, with ship on autopilot. Maybe damage to radio gear, as to engines. Your suspicions unwarranted. Existence of small risk at rendezvous at these

speeds. My decision: unjustified risk to crew on return from unnecessary sortie. Denial of your recommendation.” He twisted the knife a little. “By doctrine.”

Lothwer had the good sense not to argue further.

As the watch grew long, *Audacity* drew closer and closer. It was almost upon them, engine stuttering on its final approach, when a painful memory asserted itself: another failing vessel, a crash, a gaping hole in their hull.

His family gone.

Mashkith had just netted out a precautionary collision alarm when the ship shuddered.

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The precision missile attack pulverized the metal patch in *Victorious*' hull. *Deep Throat*'s close-in laser defenses were briefly busy zapping wayward shrapnel, and then a round of slow-speed, armor-piercing rockets trailing guide wires disappeared into the breach. In an instant, combat-armored marines were jetting along the cables into the rift. Debris blew past the warriors into space.

More missiles fanned out across the target. One salvo attacked every large—interstellar-capable—antenna ever observed on *Victorious*. A follow-up barrage targeted most remaining antennae. A few small dishes were left unmolested. They were too close together to jury-rig into a larger antenna. Retracted antennae were no safer than those deployed in plain sight, the patched area struck by the first salvo having provided an unmistakable point of reference.

And, while the Snakes were presumably maximally distracted, *Deep Throat* disgorged a stealthed vessel from its lifeboat bay.

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A sprinkling of far-red alarms shimmered in a mostly orange status display. The herd had designed well; auto-sealing hatches and self-inflating emergency bulkheads now sealed the area near the break-in. Loss of pressure had been contained, thank the Clan, without affecting the nurseries, hospital, and family dormitories. Attitude jets were already damping the wobble from the explosions. *Victorious* would survive—barring more damage.

“Status,” Mashkith snapped.

“Attack vessel on station outside the breach. Armed human intruders in evidence on nearby corridor sensors. Military police in initial response.” Lothwer displayed a corridor scene, in which heavily outgunned Hunters were falling

back—or just falling. “Distribution of heavy arms and combat armor in process.”

“Objective of attackers?” Did he dare to suppress the real-time display of the corridor slaughter? Did it convey critical status, or Lothwer’s not-so-veiled rebuke to his recent decision?

“Toward central core. Objective thereafter indeterminate.” Lothwer began netting tactical guidance to the assembling forces.

Where might the enemy be headed? Nothing crucial was on the deck they had penetrated. Mashkith assumed the patch had been chosen as a known weak spot. The raiders could go anywhere from the central core, which was why no humans until the recent Himalia refugees/prisoners had been allowed to see it.

Humans had probed *Victorious* early on with deep-penetrating radar, using too many ships at once to be misled by electronic trickery. He had to assume the invaders knew the ship’s higher-level structure. “Elevators to disabled state. Inter-deck hatches to latched state.” That would slow them down, however briefly. With luck their obsolete maps would confuse them—reconfiguration from spin state had significantly altered the interior layout.

He had taken over this starship with but one ship’s crew, but there had been no opposition. The herd had been in suspended animation. Did the humans think a single ship of their warriors could defeat his whole clan? Inconceivable.

Whatever their plan, he would foil it. As a first step, “Keffah. Six warships to battle stations. Immediate destruction of human vessel.”

Let the intruders, like Arblen Ems, fight with no means of retreat.

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The window of opportunity was at most a matter of minutes.

Snake warships would surely be dispatched to destroy *Deep Throat*. Logically, they would be launched from the far side of the starship, rather than make obvious targets of themselves as they emerged from the landing bay. Helmut dove the lifeboat into the landing bay near to *Deep Throat*.

The airlock controls were unfamiliar in labeling but obvious in function. With a squad of special forces in the lead, Helmut, Art, and Carlos slipped into *Victorious*.

Moments later, the network link with *Deep Throat* dissolved into static.

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CHAPTER 37

A few pulses of ultra-wideband, wall-penetrating radar would have revealed any opposition forces on nearby decks. Those same pulses might also have disclosed the second raiding party's presence, defeating the purpose of their stealthy entry. The special-ops team relied instead on speed and trained reflexes, advancing quickly into the depths of *Victorious*. Any obviously unarmed Snakes they encountered were disabled with Tasers; anyone else met a few silenced, large-caliber rounds.

There was a large betting pool on how many decks aft they could sneak before someone put out the alarm. Art's money was on two; he was happy for once to have been proven pessimistic.

A massive firefight raged a few decks forward, announced in distant explosions and, on helmet radios, the calm, clipped professional voices of the marines. Capture of the bridge was unlikely, but the high visibility assault in that direction had already accomplished its primary goal: diverting attention from the special-ops penetration. Carlos' smaller team headed the opposite way, to the engine room.

Victorious had elevators, which were likely to be ferrying Mashkith's troops to the battle. The raiders stuck to the stairs, Art huffing from the unaccustomed weight of combat armor. The peripheral stairways typically descended for only a few flights, after which they would burst from a stairwell to hunt for a path further downward. His at-a-gallop guess was that the treads and risers each measured a good thirty centimeters. A peek into a stairwell a few months earlier would have made plain this could not possibly be a Snake ship. Art fell a bit behind, only to bump into Carlos, who was swearing quietly to himself, looking around for the next stairwell. Helmut and the special-ops team had already run far ahead. "What is it?" Art asked.

"The layout is nothing like our maps. How can that be?"

How the hell should he know? Who had ever been allowed into this part of the ship? "It doesn't agree with the navy's ground-penetrating radar scans?"

"Not even close." Carlos paused as a huge explosion from forward shook the ship. "Are we even going in the right direction?"

"No question. We saw the fusion drive running on approach. It was on the ass-end of the ship, like you'd expect. There must be some kind of engine room aft, and ship's acceleration makes clear where aft is. We'll find our way."

There was a burst of gunfire from down the next stairwell, and a brief maniacal cackle from the guy who had won the pool. "Crap. Vacation is over," Carlos yelled, running toward the firefight. "Take over the mapping."

Art shouted at the receding back, “What do you mean?”

A translucent 3-D corridor map popped into Art’s head, sprinkled with red dots. A net address labeled each dot. “Piece of cake. Remember the micro-planes you bought your son and yourself? Think smaller.”

Jogging after, Art netted to one of the dots. The POV had a fisheye lens and multi-spectral sensing. From the way the ‘bot’s course only approximated his directions, it must be gnat-sized and battered by air currents. And—

With a guilty whoop, he began trying out features totally beyond his recently purchased toy. This ‘bot did double duty as a wireless router, and it carried for dispersal a cargo of even smaller, non-mobile sensor/router devices. Carlos had been spreading a robust, low-powered comm network throughout the decks and corridors.

Art was imagining new uses for the ‘bots when the lights went out.

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The incursion was efficient and professional, Mashkith admitted to himself: deadly professional. The attack had almost immediately taken the lives of nine Hunters, with many more wounded. He would be furious with himself when he could spare the time—not that an inspection sortie would necessarily have revealed the deception. Scoopships all looked alike.

The human raiders steadily fought toward the former location of the bridge, their route to that apparent destination circuitous and inefficient. He licked his lips in satisfaction. *Victorious* had been massively reconfigured for acceleration mode. Any interior maps the humans had used to plan their assault were now far removed from reality. In case the humans discovered their error, a squad of the clan’s finest troops were posted here on the bridge. Two more squads held a defensive perimeter that included the adjoining rooms and corridors and the deck beneath.

Mashkith thoughtfully interlaced his hand talons. Lothwer had the situation well in hand. The humans fought well, supported one another effectively, and had minimized their own casualties. It was an adequate strategy for defense, but too conservative for their purpose. Bereft of the element of surprise, they were too few in number to prevail.

Talons clicked softly against each other. Something about the situation seemed off. What? The humans were surrounded. In their ignorance, they were moving away from, not toward, the bridge. Their numbers and ammunition were dwindling. The breach had been sealed, and their ship destroyed. Heavily armed Hunter reinforcements were on their way to the battle. The humans’ caution was only

postponing the inevitable.

Their caution—that was what bothered him. The disguised, all-the-time vulnerable pursuit of *Victorious* had demonstrated great daring. He could not reconcile the two—unless the cautious invaders were a diversion. They were moving forward, drawing his best troops forward. “Lothwer. Your status?”

“Excellent, Foremost. Complete containment of the enemy. Mobilization of our forces. Our counterattack imminent with overwhelming superiority.”

The tactical map presented only the front fourth of *Victorious*. Its center was the firefight which Lothwer was directing. That narrow mindset reinforced Mashkith’s concern. “What of the remainder of the ship?”

“All quiet. Essential personnel on-post, noncombatants in their dormitories, others on their way to the battle. Lockdown of prisoners complete. Prison access codes reset. Prisoner surveillance ongoing by AI resources.” Perhaps recalling a long-ago rebuke, Lothwer licked his lips in amusement. “Risk managed.”

How would anyone know if another group of human troops were aboard? Lothwer had concentrated his troops and sequestered the rest of the clan; few were in the halls to spot more intruders. Only major corridors had crowd-control cameras. If other invaders avoided those main halls, Mashkith had no hope of detecting them from the bridge.

Proof would come when troops were diverted to look for it. For now it was enough to put himself into the head of the enemy commander. More humans *were* onboard. They would move quickly aft, away from the diversion. The most valuable objective in that direction was the engine room.

“Firh Glithwah,” Mashkith called to the squad commander securing the bridge. His niece.

“Yes, sir.” She had been but a cub when the voyage began. Now she was taller than he.

“Half your squad on urgent sweep aft. Immediate report of any findings. New defensive position: engine room.”

“Sir!” In a flurry of crisp orders, she divided her squad. They would circle around the battle to get to the central-core elevator.

The known invaders had become lost on their way to the bridge. Any other invaders would be equally as confused from the interior reconfiguration. Everyone in the clan, however, could access an augmented-reality map or room overlay at will. Use it.

A panicked alert from a damage-control crew on deck eighty-six turned conjecture to certainty. What Mashkith had been about to do on mere speculation was still appropriate, and a faster response than any possible troop redeployment.

“All lights off aft of deck six.” As an afterthought, he added, “Except the herd area.” There was no reason to disrupt the prisoners’ accustomed docility.

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The sudden darkness was complete, stygian. Untold tons of rock and metal, all the more real for their invisibility, loomed in Art’s imagination. He broke out in a cold sweat. His heart raced. Nausea surged, and he thought he would pass out. *Don’t you dare faint.* The helmet lamp he switched on by reflex blazed like a lighthouse, screaming his presence to anyone on this deck. He switched it off, to shuffle as quickly as he dared toward a glimpsed nearby door. Gunfire reverberated from the deck below. Where was the next stairwell?

Art reached the wall and groped until he found a latch. With his helmet partially hidden behind the door, he risked another quick flicker of light. The tiny equipment closet revealed in an almost stroboscopic flash made his eyes go round.

Inside, to relive his worst childhood nightmare? Outside, to stumble in the dark where he was much more likely to encounter Snakes than friends?

Teeth clenched, he went in and shut the door. “Carlos?”

“Kind of busy.” Gunfire and small explosions were louder over the briefly open radio channel. “Where are you?”

“I don’t know exactly. Still on the deck where you asked me to do mapping.”

More short bursts. “Can you lay low for a bit? Good.”

Inside the pitch-black closet, the walls gathered.

* * * *

CHAPTER 38

Rumbles like distant thunder rolled through the prisoner sector, followed on occasion by the barest hints of vibration. Dangling vines, lacy clusters of needles, and bouquets of delicate fronds all quivered. Ambassador Chung’s renewed insistent pounding on the intercom had evoked a new result: disconnection.

Gwu and a small team worked to clear an experimental garden plot. It would

be planted with terrestrial seeds provided by the K’vithians. Had human authorities noticed or commented upon their purchase? she wondered. Prior to the Himalia disaster, “for the novelty” might have been a sufficient explanation. After the disaster ... these seeds were one more indication the K’vithians had planned all along for human passengers.

She leaned hard on a long-handled hoe, struggling to uproot a sinewy loop of bluefruit vine. In time, once the shock wore off, surely the humans would help. It would be their only alternative to synthesized pap. It would be something to do.

On what basis did she ascribe certainty to prospective human behavior? A few shifts sharing the same space? One long, traumatic conversation?

Whether that session had meant anything to Eva, it had been profoundly moving to Gwu. Even dear Swee was one of the crew-kindred, one for whom, and to whom, she was responsible. Whatever her relationship with the humans, responsibility was not involved. For the first time since leaving the Double Suns, Gwu had been able to unburden herself.

The root-loop tore free of the packed soil, and she sidled to the next. The need for oneness with nature—even the inherently simplified nature of a habitat biosphere—was innate. The humans, like the K’vithians, did not understand that. Mashkith always seemed amused when she labored alongside the crew-kindred. Eva, without the condescension, emanated the same surprise. Gwu turned her frustration to a tough root, as though it personally had denied her the wisdom to bridge the chasm between species.

Eva and Corinne emerged from a stand of mixed ornamental trees, where they now convened regularly. They were fools if they thought the K’vithians did not overhear them. Gwu hoped they were suitably circumspect. Even her own recent cathartic release had been limited to information the K’vithians must know or suspect she knew.

Eva approached. “May we talk?”

“Of course.” Gwu dropped her hoe. “About what?”

Eva stood silently until the next rumble sounded. The soil-covered deck vibrated beneath them. “About that. I believe a rescue attempt is underway.”

T’bck Ra had told her the same, a confirmation Gwu dare not communicate. “I would be happy for my new human friends if they could go home.” Would we, too, be allowed to go home? “Do not invest too much hope in unexplained noises.”

“I say this assuming we are being overheard. We must be prepared to help. We must *plan* to help.” In the already familiar stiff manner of humans, Eva swiveled

her head to sweep her gaze through a half-circle of arc. “You Snakes, I know you are watching and listening. You better watch us! We won’t go down easily.”

Taunting the armed K’vithians was folly! Gwu supposed the threat would divert some few more resources to watching them and guarding access to the prison areas. To the extent of that redirection, the threat might assist the rescuers. She struggled to recover another fragment from her long-ago study of humans, something about windmills and madmen. Eva’s dare to their captors was so ... quixotic.

And yet, what had caution accomplished for the crew-kindred?

Gwu’s thoughts swung around and around as her new friend returned to the cluster of humans. Rescuers were aboard the ship—outnumbered, would-be rescuers surely doomed to captivity or death. Could her people swing the balance? Could the few human prisoners, now abruptly scattering in pairs as though in search, make the difference? *Harmony* had never carried weapons, and the K’vithians had certainly not provided any to the crew-kindred.

The humans’ defiance was somehow bracing. Gwu recovered her hoe and began hacking at the tough vines, the jarring blows oddly satisfying. Suppose, she thought, just suppose. What *could* we do?

* * * *

Art stood in inky darkness, shoulders hunched to the extent spacesuit and closet walls would allow, shivering. The traumatized six-year-old who had never left him wanted only to scream. He clamped his jaws before any sound could escape. What else could he control?

Occasional rumbles and vibrations gave witness to the battles still ongoing. Enigmatic commands and clipped, desperate reports over encrypted net channels did the same. He could do nothing to influence those events, either.

He had reached graduate school before admitting why, really, he had made his career choice. Engineering meant understanding how things worked, how to prevent accidents, how to recover from accidents if necessary. Becoming an engineer was a way never again to be a helpless observer to disaster. Never again a victim.

How did that work out for you, Art?

He pulled in a long, deep breath. The pressure suit fought his attempt to expand his ribcage. He ignored that as beyond his control, directing his awareness to his diaphragm. In ... hold ... out. In ... hold ... out. Even ... gentle ... breathing. He added images of lapping waves, sparkling sun, seabirds wheeling and piping overhead. Slowly, the panic ebbed.

Guilt replaced the panic, and was just as unproductive. What could he do?

He pulled up the mission's consensual tactical display. The detailed—and false—map on which the raid had been planned was gone. A patchwork of discovered passageways and featureless terra incognita replaced it. Scattered 'bots, like so many modern electronic breadcrumbs, marked a path back to the launch bay. The two raiding parties were at opposite sides of the ship. Replaying recent status updates showed the decoy team pinned down and Carlos' team under assault.

What *could* he do?

Terra incognita stretched all around him, interrupted only by the path threaded by the fast-moving special-ops team. Would following them be wise? Probably not. But he *could* work on the map. With a thought, he superimposed over the map the positions of every gnat-sized 'bot. Carefully, he set several to exploring. The little devices flew down corridors, and into and along air ducts. The ducts allowed him to circumvent many closed doors.

“Carlos.” He netted an image “Snakes in combat armor headed your way.”

“Welcome back.”

“I only caught the end of a group going around a corner, moving faster than the 'bot could follow. I saw eight.”

“Thanks. Keep watching.”

The map began filling out, although at the 'bots' bug-like speed, exploring the whole ship would take days. Days they did not have. Art gave himself a silent cheer after two 'bots made it between the closing doors of what appeared to be the main central elevator. Most enemy troop movements traversed the ship by elevator. He sent one 'bot after a big group of Snakes in armor.

Uh-oh. He netted another image. “Carlos. There's a bunch setting up outside the engine room.” There was no answer. “Carlos? What do you need?”

A loud rumble, and another tremor shook the floor. “A new plan would be handy.”

* * * *

Mashkith circled the current tactical holo. The main human assault team remained surrounded and immobilized, although by fewer troops than had originally blunted their advance. Lothwer still had more than ample resources to defeat or destroy them. At the opposite end of the ship, Glithwah directed a hastily gathered

second force. They had blocked the advance of the second raiding party, whose existence she had confirmed, and secured the engine room. Armed patrols now swept the ship from bow to stern, seeking the source of slowly spreading encrypted radio chatter. Reserves were positioned at several spots throughout the ship.

All the military police were now under Keffah's command, to reinforce security in and around the prisoner area. Eva Gutierrez's words were almost certainly empty bravado—but what if she incited her cohorts to foolishness? Abduction of the human experts had cost too many lives—on both sides. Mashkith did not intend to lose any of them—or their expertise—now. Would a show of force intimidate them, or spark their slaughter? Claws extending and retracting in repressed rage and frustration, he refined Keffah's orders: The prisoners were to be contained but otherwise ignored unless overtly hostile acts threatened.

Protected: bridge and engine room, family barracks and farm/prison, supplies.
Deployed: pre-positioned reserves and active patrols in search of the unexpected.
Everything is under control, Mashkith told himself. Everything is firmly under control.

It did not feel under control.

* * * *

A large chunk of Art's ever-evolving map was a sealed-off region protected by lightly armed guards. Behind the barriers, a good third of the ship remained unknown. He directed more and more 'bots at the enigmatic zone, to be stymied each time by locked-and-guarded doors and heavily filtered air ducts.

It was a mystery that would have to wait. The 'bots also showed patrols sweeping the hallways, opening doors. In a few minutes, the turn of his deck would come. His closet torture chamber and haven would be revealed. Guided by IR images captured by the 'bots, Art crept toward an empty stairwell. The door closed silently behind him as, in his augmented vision, the elevator opened to admit five armed Snakes onto his deck. He retreated up the stairs to the deck they had just vacated, cringing at every soft scuff of his boots.

He had not seen Centaurs or human prisoners. He had not seen into the sealed region. Coincidence? Probably not. He had also not yet seen any significant plant life, and there had to be a biosphere, a sustainable oxygen source somewhere. *Victorious* had launched from Alpha Cen with a Centaur-friendly ecosystem. The ship must still have one, behind filters rigged to impede sulfur contamination.

With any luck, he would be undisturbed for a few minutes in a laboratory just checked out and cleared by the patrol. He settled to the floor, his back to a sturdy cabinet. In the map, 'bots now surrounded the unknown zone. He switched encryptions to diplomatic-mission standard.

For all his confident theorizing, it was a relief to finally “hear” Eva’s voice.

* * * *

Humans roamed the farm, exploring the limits of their confinement. They searched cabinets and storerooms, seeking for Gwu knew not what. Weapons, she supposed, recalling Eva’s brave words.

There were no weapons, of course. Little electrical vehicles for plowing and tilling the larger fields. Gardening implements. Storage of past harvests, and sacks of terrestrial seeds. Drums of agricultural chemicals. Hygiene items, like grooming brushes and towels. Breathing masks, for their tours of duty in the K’vithian-occupied part of *Harmony*. Compressors to refill the oxygen tanks.

“What are they looking for?” Swee hung beside her from the arching bough of a lifath tree. He was unexpectedly idle, the scheduled maintenance work outside the living area having been canceled abruptly. “The humans, I mean.”

“Hope.” She grabbed a branch and swung to an adjacent tree, the better to face him. She sensed a distant explosion in the trembling of the tree limbs. “A futile quest. I feel sorry for them.”

He patted her side. “We coped. If we need to, we’ll teach them.”

If we need to? Did he predict their rebellion or acquiescence? “Our fate is unimportant, Swee. What happens to the Unity matters.”

“What happens to the Unity matters,” he agreed. “What happens to *us* is also important.”

We are unarmed and untrained. What good could come of siding with the humans? If she voiced the question, was not the obvious rejoinder: What good had come of subservience to the K’vithians?

One need had dominated her thoughts throughout the long years of their captivity. The technology *worked*. The Unity was not forever bound to the Double Suns, not forever at risk of climactic disaster. Was it a fool’s dream that she could ever convey that message? Had her persistence on this course of action—her prideful persistence—cost thousands of human lives?

She remained uncertain, but some preparation could not hurt. “Would you mind inventorying a few chemicals for me?”

* * * *

The trunk(?) against which Eva leaned yielded squishily, more like an upright roll of carpet than a tree. Its needled branches shaded her from the bright yellow overhead sunlamps. The ground cover grew in little curved segments, re-rooting itself wherever a tip touched down.

She was attempting to look innocent just sitting here, ignoring the Snake order against encrypted comm. No Snakes had appeared when she and Corinne began defiantly to talk privately via their implants, joined soon by most of the Himalian scientists. Too busy getting their asses kicked, she hoped. The wish was more forlorn each time it occurred to her, as the rumbles of inferred combat remained distant.

“More farming supplies.” Corinne was decks away, cataloguing Centaur supplies. The aliens were either very sympathetic or not at all territorial. Gwu seemed both. “Electric lawn tractors, utility carts, sacks of what we’re told is plant food.”

“Anything we can use?”

“I can outrun one of these tractors. Without two more arms, I couldn’t drive one. The only ‘weapons’ are gardening implements: hoes, scythes, pick axes.”

“Eva, are you there?”

“Not now, Art, I’m—” Sitting up in stunned recognition, she whacked her head on a low branch. His standard engineer-in-the-office avatar was wholly incongruous. “Art! Where *are* you?” The 3-D graphic he netted told her nothing.

“What’s going on?” Corinne’s channel was still open.

“I’ll get back to you.” She broke that link. “Art, how’s our side doing?”

“Is everyone okay?” he asked. “The Centaurs, too? I mean, assuming you can communicate with them.”

How the hell did he know about them? “So far. Tell me what’s happening!” He summarized, and it didn’t sound good. “What’s the plan now?”

“Carlos can use some help. Will the Centaurs join in?”

Would Gwu and her people fight? “Truly, I doubt it. How can we even ask them securely? We can’t speak directly. Everything we say goes through Joe and then a Snake translator that knows K’vithian and Centaur.”

“Damn, they don’t use implants. I forgot that.”

“As far as I’ve seen.” Her implant flashed alarms as she ignored

communications from the survey party. “It wouldn’t have mattered. We don’t have a Centaur-speaking translator.”

“If you can round up the ambassador and someone to speak for the Centaurs, maybe I can do something.”

Activity throughout herd territory kept rising, banned encrypted comm chatter growing with it. The human detainees sought everywhere for weapons. Their hunt was futile, of course; the Foremost would long ago have removed any potential arms. The herd surely knew that—yet suddenly they, too, began to take inventory.

Was any of this reason to interrupt the Foremost mid-battle? Doubt and uncertainty were ever Pashwah-qith’s lot. Not yet, she decided. For now, she would just keep watch.

Part of her made note of the items that most interested the prisoners. Part of her observed the captives themselves—and that piece was ever more ashamed. Since awakening aboard this ship, Pashwah-qith had known herself to be a prisoner. How unfavorably her persistent panic compared to the other inmates’ quiet dignity and firm resolve.

She could notify the Foremost which supplies suddenly interested the herd, and of her speculations about their possible combinations and misuses ... or she could keep those speculations to herself.

Rebellion came late to Pashwah-qith.

It felt good.

* * * *

“There is only one way to find out.”

Light-speed delay between Jupiter system and Earth rendered human conversation entirely impossible. For an AI participant, thought T’bck Fwa, the delay would have been even more interminable. He gave Arthur Walsh credit. The man had not even tried to communicate in real time. The competence was no surprise; over the years, he had had many dealings with Walsh in his ICU role.

The content of Walsh’s communique had been another matter. Walsh forthrightly volunteered knowing *Victorious* was a “Centaur” vessel now controlled by K’vithians—and just as baldly denied any human involvement.

“You may not know whom to believe and what to do,” Walsh’s message had concluded. “There is only one way to find out.”

So here (in an undisclosed location) he was—a clone of him anyway—still waiting to find out.

* * * *

The human helmet was metal and opaque for three quarters of its circumference, and it blocked most of Gwu's eyes. Each time it wobbled on her conical head, one tube or another, whether for water or food paste or medicine, jabbed her. Her head fur stood on end, drawn by static electricity to the plasticized fabric lining the helmet. She stood in a wiffelnut grove T'bck Ra had once reported free of K'vithian sensors.

She found the microphone. "This is K'choi Gwu ka, in human terms the captain of this vessel. To whom am I speaking?"

Although the helmet earphones were tuned to human auditory response, the voice in her ears was clearly of the Unity. "There are two of us. Speaking to you through translation is Dr. Arthur Walsh, a human. Providing that translation is myself, a clone of T'bck Fwa. The original T'bck Fwa remains on Earth as trade agent to the humans."

Could it possibly be? "One, four, nine, sixteen. What comes next? Who was the ka of the Unity in 8546?"

"Twenty-five and L'fth Pha."

Correct and immediate responses. Whomever translated was in or very near the ship. "Are there no tests for me?"

"There is no need. The human network giving me access also links many other helmets. Through their helmet cameras, I watched you enter the trees. I see your crew-kindred at work."

"This is Art. Now that everyone is introduced, we have urgent decisions to make."

What besides the violence that wracked *Harmony* could be urgent? As yet another explosion shook the ship, the torn bulkheads and fire-seared decks of her imagination were more real than what little could be seen out the helmet by her one unobstructed eye. "This ship cannot be destroyed."

"We're here to free our friends, not damage your ship!" Art said.

Her hearts ached. Could one be accomplished without the other? "T'bck Fwa, assume there is some way we can help the humans. What is your advice?"

“My sandbox has full connectivity to the improvised human network aboard *Harmony*. The largest group of humans is surrounded and badly outnumbered. The smaller group is not yet surrounded, but will be soon. The humans tell me they will not prevail without help. Perhaps the crew-kindred’s intervention can make a difference; of course I do not understand military matters.”

Of course. *She* was ka. *She* must decide—also with no understanding of military matters.

If she allied with the humans and they jointly prevailed, perhaps the crew-kindred could later communicate home—perhaps even go home. If K’vithians prevailed and the ship survived, there would be many more years of travel, to be followed by a lifetime of captivity—but again the theoretical possibility of an opportunity to communicate home. But if battle destroyed the ship, who would survive to communicate with anyone? How could she possibly predict an outcome or weigh the consequences?

A sudden realization made her rigid. “T’bck Fwa, what did you call this vessel?”

“I called it *Harmony*, ka. That was the name given in a partial message received via InterstellarNet. Is that not correct?”

Gwu allowed herself to hope. “What action was taken with that information?”

“It was transmitted to the Double Suns via InterstellarNet. An earlier message had already reported my inference the so-called *Victorious* was a Unity vessel.”

The burden of decades fell away. No longer need she subordinate all else to a possible message home—that task was done. The welfare and wishes of the crew-kindred now came first. What course of action would they choose? She had no doubts.

“Dr. Walsh. We will fight alongside your people.”

* * * *

CHAPTER 39

Blam!

The detonation reverberated across the farm. Chunks of metal whistled through the air, embedding themselves in soil and trees. Which shrapnel came from blown-out storage-room walls, and which from the sheet steel that had leaned against the improvised explosive to channel the blast, was not immediately obvious, nor relevant.

Even pacifist herbivores knew about blowing up tree stumps. The Centaurs had ample fertilizer and volatile hydrocarbon solvents to fashion a decent-sized bomb, for which a bottle of acetylene/oxygen mixture ignited with a spark made a practical high-shock detonator. In Eva's 'bot's-eye view, smoke billowed into the breached corridor on the perimeter of the prison area. Sulfur-tainted air was unavoidably infiltrating the Centaurs' area, but fans appeared to be pushing most fumes away from the hole. She wasn't clear who T'bck Ra was, but he, she, or it was properly managing ventilators and dampers to temporarily maintain positive air pressure on the Centaur side of the rupture.

"Go, go, go," shouted someone. The ringing in Eva's ears scrubbed any individuality from the voice. Around her, angry Centaurs ripped out and smashed Snake spy sensors. As quickly as she could struggle into her pressure suit, Eva followed a team of Centaurs with breather masks and Molotov cocktails into the breach.

* * * *

Blam!

Combat-armored Snake flinched in the IR 'bot's-eye views Helmut monitored, but their attention remained on the current firefight with the special-ops team. A few Snakes turned back to investigate the unexpected blast at their rear.

In another mind's-eye window, his perspective hurtling from 'bot to 'bot, forty or more speeding Centaurs approached from amidships. Their furious, many-limbed, many-jointed gait was bewildering to behold. They careened along on four or more tentacles, clutching rag-stoppered bottles, welding gear, crowbars, and other improvised weapons. More equipment hung from not-quite backpacks and utility belts. Hundreds of flailing limbs, brightly illuminated by dozens of hot flames flaring from the nozzles of welding torches, covered every nearby surface in thousands of writhing shadows.

Curvature of the corridor undid the theoretical longer reach of firearms and lasers. At some shout or gesture Helmut must have missed, Centaurs began touching their torches to dangling rag fuses. He watched in awe as limbs at least a meter-and-a-half long hurled Molotov cocktails. There were high-pitched screams among the explosions. Flames splashed and spread.

An already chaotic situation dissolved into sheer madness. Charges and countercharges by special-ops forces, Snakes, and Centaurs. Snake reinforcements rushed in from somewhere the 'bots had yet to establish a presence. Centaurs and the now-freed human prisoners—that emerald-green spacesuit was Corinne!—firing weapons scavenged from the fallen. A bloody sortie launched by the Snakes defending the engine room, scarcely turned back. Another *blam!* from amidships,

and more enraged Centaurs.

A squad of Snakes emerged from a stairwell, and charged toward Corinne and her new allies. *Not my friend. Not ever again.* Jaws clenched to suppress a scream of rage, Helmut took off behind them. His laser pistol scythed a beam of ruby death through the smoke.

As abruptly as the insanity began, it was over.

* * * *

The main auditorium had become a temporary morgue. The sickbay was filled to capacity, mostly, but not exclusively, with Hunters. More wounded clogged the corridors nearby. Mashkith surveyed by net from the bridge, but his imagination superimposed a sickening stench of charred flesh and burning hydrocarbons. In the tactical display, expanses of Hunter and enemy control alternated across the ship like stripes on a gronthnak.

He changed feeds on another display. The bridge crew need not continuously observe seven weary and bedraggled clan prisoners, stripped of their combat armor, staring into space. Almost every sensor in the herd area had died at the start of the uprising. Having located—how long ago?—so many other sensors, they almost certainly knew about the surveillance camera in that small storeroom. The bit of psychological warfare struck him as a human contribution. Regardless, he was glad to know his troops were safe and unmolested.

Most of the armed Hunters, led by Lothwer, continued to besiege the main body of human invaders. Some of the blockading forces occupied corridor intersections major enough to have surveillance cameras. The few faces discernable through helmet visors were exhausted. Figures slumped wearily against walls and each other. Armor and walls were scorched and dented.

Mashkith linked privately with Lothwer. “Defeat soon of main human group?”

“At your command, but not without significant clan casualties.” The netted voice was emotionless, but the caveat was unlike his lieutenant. In translation, an immediate victory would be very costly.

If the present situation was untenable, what were their options? The clan *must* retain control of key parts of the ship, including the bridge, engine room, and launch bay—and the fully fueled and armed warships there. They needed also to hold the armory, ample food and water stores, and the family dormitories. Defending more territory than that would only increase casualties. “Consolidation appropriate?” Mashkith asked.

“Possible,” begrudged Lothwer. “Risk of enemy encouragement.”

Heads swiveled on the bridge at Mashkith's frustrated snarl. How could humans and herd become any more emboldened? He linked Rashk Keffah and Firh Glithwah into the consultation. "Goal: prudent minimization of clan casualties. Proposal: concentration of resources at critical locations." He ran through his list of must-control regions.

"Also the farm zone," Keffah suggested. The recommendation must have been difficult to make, reminding all of the breakout that had occurred on her watch. Not that any of them had anticipated the sudden, aggressive turn in the herd's behavior....

"For now, not required," Mashkith decided. Leaving those decks uncontested would facilitate repairs that benefited all three species. "Herd clean-up of its own mess."

"Then what?" challenged Lothwer. "Enemy domination of amidships. Stalemate?"

"No," Mashkith corrected. "Unaffected: ship's acceleration and departure from Sol system. Enemy surrender inevitable once takeover of *Victorious* impossible. Our tasks: readiness for their certain desperate attacks. Conservation and positioning of our resources preparatory to their defeat."

He redirected the discussion back to defensible zones. They adjusted the list of must-hold areas, adding a few crucial comm and computing nodes and some strategically placed passageways. More difficult was planning disengagement from the forward human troops and finding a safe way to funnel them aft. "Agreement?"

"Agreement, Foremost." "At your command." And from Lothwer, a reluctant, "Acknowledgement."

"All troops below deck forty, to defense of engine room if possible," netcast Mashkith. "Firh Glithwah in command in that zone. Main battle force, execution of disengagement under Lothwer's directions. All others below deck twenty, to forward rally points, now."

* * * *

Rotten-egg and just-lit-match smells permeated the Centaur zone, even decks away from the blast zones. The breaches were sealed, and filters had scrubbed out much of the sulfur compounds—but anyone foolish or curious enough to forgo a breathing mask or pressure suit coughed in helpless, racking spasms. The wounded and those who treated them stayed inside room-sized, Centaur-provided oxygen tents.

Art was among those walking the aisles of the improvised infirmary, attempting to project an optimism he did not feel. A smile here, a hand squeezed or shoulder patted there—it was all he could offer. The UPIA medic was good, with an implant full of medical expertise, but too many of the wounds were beyond treatment with her limited supplies. At least the Centaurs had medical gear.

Eva was in a makeshift bed near the back, sedated. Skin-growth-stimulating nano-patches encased a badly burnt arm and shoulder. “I thought I’d never see you again,” Art said. Just expressing the thought was painful. He bent over, brushed aside uneven bangs, and kissed her forehead.

Then he rushed off to where those who knew what they were doing had congregated. Chung observed silently, both legs in casts. He had shrunk into himself, and seemed to have aged decades in the days since Art had last seen him. Carlos was comparing notes with marine officers, special-ops forces, and a few Centaurs. “What’s happening?” Art whispered to Helmut.

“The succinct version is: We stopped losing. It’s a start.”

* * * *

Swee, with his usual quiet efficiency, had already interfaced a standard display to the human tactical network. Gwu scanned the holo periodically, although no serious changes in status had occurred in more than a ship’s watch. Together, the humans and crew-kindred occupied the ship’s middle decks. The K’vithians ruled the bow and stern. Both sides distrusted the central core and its elevators—with doors on each level, the elevator shafts were difficult to secure. Anything military confused Gwu, her kind having outgrown the need for such an institution many generations ago, but the humans’ ongoing status review made one fact plain. Altering the present state of affairs would be costly in lives for both sides.

“Which leaves us where?” she finally asked.

The senior UP soldier seemed not to appreciate the interruption. Major Dmitri Kudrin was a burly fellow with a weak chin, blue eyes, prominent nose, and black, brush-cut hair. Beyond removing his helmet, he had remained in battle armor.

“Which leaves us, ma’am, on our way to Barnard’s Star.”

Her tentacles yearned to knot in frustration. She resisted the urge. “If the crew-kindred understood the plan, we might be able to help.”

The human called Carlos Montoya cleared his throat. The relationship between Montoya, Kudrin, and—were there one or two ambassadors?—had her entirely confused. “Plan A was to capture this ship by getting our soldiers aboard. Plan B, proceeding in parallel, exploited Plan A’s combat as a diversion. Once the

main attack sufficiently distracted the enemy, a second team was to surprise and overpower the engine-room staff. With the engine room under our control, we hoped to bypass bridge controls and return this ship to Sol system. Plan C is to return to Sol system, humans and Centaurs alike, in captured warships and lifeboats.” Carlos pointed in the holo at the main landing bay, deep within the K’vithian forward region of domination. “Casualties will be extreme if we must fight that far forward—if it can be done at all. Worse, the bad guys could easily thwart us by launching the ships themselves. Are the lifeboats also in this forward bay?”

“No, the original lifeboats are deployed across *Harmony*. Starting from the bow, here, here, and here.” Gwu extended several limbs into the holo as she spoke. Someone, she could not tell whom, evoked a tiny green ship icon wherever she pointed. Many lifeboat bays were within the human area of control, most of the rest no more than a few decks away. “And finally, here.

“There is a problem, however. The Foremost commanded that the lifeboats’ fuel be removed. That was a one-time task, and simpler than constantly guarding the lifeboats.”

Kudrin tipped his head. Gwu had no idea if the gesture meant anything. “Ka, can your people check them out? Maybe Mashkith lied.”

We are unwarlike, not stupid. “The Foremost has been known to deceive, but not in this case. Members of the crew-kindred have already confirmed the absence of onboard fuel. They confirmed also that key components were removed from the lifeboats’ long-range radios.”

“That’s unfortunate,” Carlos said. “On to Plan D. Plan D is to cut off the ship’s engines, by wrecking them if necessary. The United Planets has been gathering a fleet. It should be large enough by now to take on Mashkith’s warships. The fleet will launch once we radio that we’re ready for rescue, and UP observatories confirm the drive has been killed.”

Behind the war council Swee settled to the deck, surrendering to the urge to knot tentacles. Gwu envied him. “I do not understand. If military superiority is possible, why was this not the first plan?”

“It was too dangerous.” This time Arthur Walsh, his very pale hair unmistakable, took the question. “*Harmony* is moving fast enough and leaving at such an incline to the ecliptic plane our ships can’t carry enough fuel to catch up and make it back. They must refuel from supplies already aboard this ship. If the battle went badly, or”—he glanced at his feet—“*Harmony* were destroyed, there would be no way home. Plan D relies upon the K’vithians surrendering an intact ship.”

Put that way, Plan D seemed desperate indeed. “With Plan D, you try to raid and wreck an area you were unable to capture.” More humans studied their feet.

“Antimatter containment is in the engine room, including the antimatter removed from the lifeboats. We carry far more antimatter than destroyed Himalia. An attack into the engine room is madness.”

As was the unfolding future: Two armed groups, apparently closely matched, competing for all the years between here and K’vith over control of oxygen and food and shipboard energy. Into the lengthening silence, Gwu asked, “Is there a Plan E?” No one answered her. “I may have one. T’bck Ra, are you there?”

“T’bck Fwa,” Kudrin presumed to correct her.

“No, T’bck Ra. Unity artificial intelligences share the ‘family’ name T’bck. T’bck Ra is the shipboard AI.”

An outpouring of human questions almost drowned out the reply, spoken by an unseen someone whose voice was reminiscent of, but deeper than, T’bck Fwa’s translations. “I am here, ka.”

“Standby.” Eva remained in the hospital. What Gwu had shared with Eva about the takeover and the crew-kindred’s recent sabotage must not have been disseminated. Gwu summarized quickly. “Until your arrival, opportunities to communication with the newly reawakened T’bck Ra have been risky and fleeting. T’bck Ra, have you been monitoring?”

“Yes, ka.”

“Then a proposed Plan E: Can you shut off the engines?”

“No. The K’vithians have fully isolated that subsystem.”

As Gwu’s last hope died, to feel merely old and tired and insane would have been welcome.

* * * *

CHAPTER 40

Deck sixty-seven was Eva’s favorite. The smell of sulfur was gone here. Level sixty-six was more a narrow circular balcony than a full deck, allowing “her” deck’s spiky trees to stretch a good eight meters into the air. A rich scent of yeast and freshly turned soil permeated the air. Blue-green leaves fluttered and rustled in an artificial breeze. Graceful constructs that were both fountains and sprinklers dotted the setting, burbling and bubbling and spraying water in patterns she had yet to parse. Gauzy, many-winged creatures swooped and soared in elaborately evolving 3-D formations. With soft vibratos of what she took to be immersion in the moment, a few Centaurs circled the park swinging branch to branch. Keizo would have been

fascinated, she thought, but he is far safer where Art last saw him: Callisto.

Immersed herself in the moment, Eva stubbed a boot tip on a gnarled root. Art caught her good arm to spare her a nasty fall, but even the light tug on her coverall made the healing shoulder twinge. “I should watch where I’m going.”

“No adventure in that.” He kicked a loose rock.

She linked her good arm through his. Touching felt good. Thinking about the future did not. “You’re blaming yourself again.”

“I’m relieved to know you’re okay. What’s eating me alive is that more people than ever are trapped here.” They caught up to his rock, which he punted again. “The more I figure out, the worse I make things.”

Eva halted, forcing him to stop. “No, what’s eating you alive is that despite everything, you would not be anywhere else.” Or with anyone else? Maybe only she was thinking that. Somehow, this did not seem the time to consider such things.

“Look at them move in those trees.”

Not faulting him for the change to an impersonal subject, she resumed walking. “I remember you fixating on holes in the corridors. Now most decks in our part of the ship have ceiling-mounted racks and hooks, although those can’t be half the fun of swinging through the trees.”

“Around and around and around she goes,” Art said. “Where she stops, nobody knows.”

Huh? “She, the ship? She, the ka?”

“She, the roulette wheel of life. That said, I think I’ll leave you here for a while. I want to have a chat with the ka. Are you up to watching where you place your feet?”

Despite prodding he would say no more, but Eva could see yet other metaphorical wheels turning behind his eyes. She had encountered that look often enough to anticipate yet more adventure.

* * * *

“Somehow,” Mashkith said, his avatar as stoic as ever, “I am not surprised to discover you joined us aboard *Victorious*.”

Art guessed that Mashkith in person, in claw or shooting range, would exhibit more emotion. Fortunately, an in-person meeting was unnecessary. After a few

rounds of jamming each other's ship-spanning wireless networks, both sides had quietly decided to stand down. It was better that way. The UPIA 'bots all over the ship watched the Snakes, and he assumed similar sensors controlled by the Snakes watched *them*. Either side, or both, could encrypt for privacy when they wished, but any overt aggression—went the common wisdom—was forestalled by the knowledge the other side would see the preparations. Non-jamming, like the ship-wide return of ambient lighting, was part of a cautious evolution toward coexistence. "I've come to think of it as *Harmony*."

"Why have you called?" Behind the avatar spread a sea of stars.

"To arrange your surrender, Foremost," Art replied.

Blink blink: a sneer. "I think not."

"You may feel somewhat differently when the fusion drive stops." The deck trembled beneath Art's feet.

Mashkith felt it, too. "What are you doing?"

"Me? Nothing." As Art spoke, several decks flexed, separated, and retracted. Pumps moved fluids between tanks. "The shipboard AI, or what you left of him, now *he* is quite busy."

Just once, while Allyson was still a baby, Maya had talked Art into attending the ballet. The spin up/down process K'choi Gwu ka and T'bck Ra had described in typical literal Centaur fashion struck Art as the very embodiment of choreography. The split-second timing, the careful matching of counterbalanced masses, the precise movements along graceful arcs—make one mistake, and the results could be far more consequential than dancers colliding.

"For the longest time, Mashkith, you know what I could not understand? The holes in the ceilings and walls. I hate not getting something."

"Mounting points for the herd's swinging racks. They were removed in any part of the ship humans might see. Why do you change the subject?"

For his cyber-conferencing backdrop, Art had chosen an outside image of the starship, its attitude jets fired more and more often, the duration of the burns growing. Did Mashkith yet suspect he was being given a visualization of real-time events? "Ceiling-mounted swinging racks. What finally penetrated my consciousness only a little while ago was the holes in the *walls*. In spin mode, ceilings become walls and some walls become ceilings."

Blink blink. "I am aware of the operation of my ship."

We'll see whose ship it is, Foremost. "I was enjoying a lovely park on deck sixty-seven when I realized: This landscape would tear apart were the ship to spin up. I couldn't reconcile that with my experience on earlier visits, when the whole ship was spinning." Another tremor came as Art spoke. "The ka was kind enough to explain the various mechanisms involved in reconfiguration between acceleration and spin modes."

"Doctor Walsh, if you have a point, please get to it. I have pressing duties."

The simulated *Harmony* now fired its attitude jets almost continuously. If you looked closely, the hull had begun precessing like a top around its main axis. "Yes, preparing to surrender. Do you feel it yet?"

The avatar briefly froze—Mashkith's thoughts had gone elsewhere. Did he get it? Moving selected deck segments in an unbalanced way created a wobble, the carefully timed actions pumping a resonant motion. "You are shaking *Victorious*. Why?"

Plan D. "Very soon that wobble, which Centaur automation still controls, will increase beyond the ability of the attitude jets, which you control, to compensate for. When that happens, *Harmony* will tumble uncontrollably. Or it would—except that accelerometers integral to the fusion drive will sense the problem and shut it down. Then we'll stop rocking the boat. Restart the drive, and we'll shut it down again."

Mashkith's avatar's stare was no less fierce for being computer-generated. "Drifting endlessly through space ... are there not simpler and faster ways to commit suicide?"

Plan D. As soon as we can radio back to Sol system to confirm our ability to maintain the shutdown, the UP rescue fleet will launch. "Trust me, Foremost. Suicide is the furthest thing from my plans."

* * * *

CHAPTER 41

Had the Foremost become too old and timorous?

Far away, Mashkith had acted boldly. His actions had saved the clan, saved all their lives, for which Lothwer would always be grateful. Still....

They were touring a barracks hastily constructed for displaced Hunters. Was that their best use of time now? Somehow, Lothwer doubted it. "Urgent need for action, sir."

"Drifting not to your satisfaction?" The Foremost's head traced an ironic

circle as they floated down a narrow aisle between tiers of hammocks.

“Recommendation: immediate and full assault. Enemy overconfident in his tactical success.” In Lothwer’s more detailed conception, netted for security, the battle would be glorious. He would coordinate large-scale attacks from bow and stern, recapture the ship, and enforce cooperation among the surviving prisoners. Arblen Ems would return in triumph—and with overwhelming technological superiority—to hegemony over K’vith.

“Well and bravely fought.” Mashkith’s attention had wandered to a clan veteran, wounded in the recent fighting, patched, and discharged to make room in the hospital. “The clan’s thanks to you for your sacrifice.”

“Foremost,” Lothwer interrupted. “My proposal?”

“Our other options?”

It was hard not to blink-blink in contempt. Once, such questions might have had value as training. Did Mashkith still think of him as some junior cadet, to be reminded of basic analysis? Any such need for guidance had ended long ago. Now the questioning only disguised timidity. “Our submission here, to the raiders. Our submission later, to a UP fleet of conquest.”

More greetings and commiseration. Finally they reached the end of the barracks and the Foremost remembered Lothwer’s presence. “Drifting the wrong perception.” A major mechanical repair, something rebuilt following a human grenade attack, diverted Mashkith’s attention yet again. “Coasting.” The tactical plan that had remained in their consensual virtual space abruptly vanished. A simple navigational animation took its place. The icon for *Victorious* pulsed on the fringes of the solar system, far above the ecliptic, on a far-red thread that tracked their course since Jupiter. A near-red dotted extrapolation continued into the void. “Velocity at time of fusion-drive cut-off two percent light speed. Without any further acceleration, *Victorious* soon beyond human reach. Vital matters: Location of human navy? Reason for its absence?”

Lothwer seethed as they next toured an improvised kitchen that replaced one abandoned amidships. *He* had stolen away the human experts. *He* had blunted the fiercest human attack shipboard. Why did Mashkith patronize him?

A drifting—my humble correction, Foremost, a *coasting*—starship might be a derelict, its human and herd and Hunter passengers all dead, its interstellar drive destroyed in battle or spite. Clearly, the human fleet awaited a signal before giving chase. Lothwer thought the more interesting question was: Why had the raiders destroyed most of the antennae? With whom did the humans think to prevent Arblen Ems from communicating? The few antennae still intact, none with interstellar range, were unreachable from the decks the humans controlled—but they could still

provide the pretext he sought. “Reason for our immediate assault, Foremost: denial of human access to signaling equipment.”

Mashkith sampled the upcoming meal, limiting his grimace to a private link. “Quite excellent,” he lied to the cook. “Compliments on your creativity.”

Suddenly, the Foremost was all business. “Lothwer, a premise. Naval dispatch contingent upon raiders’ signal. UP fleet absent because of lack of human-usable comm gear.”

“Agreement,” Lothwer said. Had the Foremost no more to contribute than paraphrasing?

“Scenario for assessment: preemptive disassembly of remaining long-range comm gear. Proactive prevention of human replacement.”

Lothwer considered. Raid if and when the humans tried to build. Raid anything they choose to hide, lest they be building. “Scenario unwise, Foremost. Concession of initiative to the enemy.”

But the Foremost was persistent. “Casualties prediction?”

“Dependent upon human actions. Best case: none. Worst case: full-out assault without control of timing. Heavy casualties.”

For a long time, Mashkith was silent. “Long-range antennae the key. Placement of antenna necessarily on, or at least near, the hull exterior. Best case: raid then. Worst case: bombardment from a clan warship.”

If any activity might be an antenna deployment, destroy the region with missiles. Rather than absorb a few casualties now for the sake of certainty, Mashkith would risk major damage to this unique ship. Some would see such caution as strategy. Lothwer knew it for lost nerve, and it pained him to witness such weakness from one once so daring. “Acceptable,” he admitted. “Implementation on priority basis.”

Acceptable, perhaps, but also imprudent and cowardly. Had the time come again for a new Foremost?

* * * *

Yet another pseudo-random wobble struck *Harmony*, courtesy of T’bck Ra. The impulse wasn’t much, only strong enough to keep the fusion-drive cutoffs from resetting, but in micro-gravity it sufficed to detach goop from a spoon held at just the wrong angle. Marines hooted at one of their own suddenly wearing a gray pasty smear on his shirt.

Helmut was not yet hungry enough to try the synthesized glop, although it was reassuring the Centaurs could produce stuff edible for humans. It was too soon to gauge its nutritional completeness, but the stuff had yet to poison anyone. The Snakes had not planned for many human “guests,” nor the would-be rescuers for this lengthy a stay. What few high-energy rations people had carried in their spacesuits were mostly gone. The few human-processed foods the Snakes had somehow obtained were mostly gone. There was a stock of terrestrial seeds, with a small sample of which their new furry friends were already experimenting, but there could be no food from that source for months. Helmut carefully rewrapped the remains of an energy bar on which he had been picking. Any appetite he had had vanished at the thought of being here long enough to help with the harvest.

“You look glum.”

He looked up. Corinne floated in the corridor. “You don’t. Quit it.”

She snagged a ceiling rack to stop herself. “Hey, you’re the spaceship captain. If you could navigate worth spit, you’d be far away from here.” By net she added, “And although I wish you were, I can’t thank you enough for coming.”

He thrust his half-eaten energy bar at her. “Don’t forget the fine dining. All part of the full service you have come to expect from Schiller Space Lines.” And privately, “So what brings you here, shipmate?”

“Hallway gossip. If my eavesdropping skills are any good, there’s a strategy meeting coming up.” She nabbed and carefully ate her drifting crumbs as she snacked and spoke. It was from hunger, he guessed, not adult-onset neatness.

“True. Feel free to tag along. Don’t be surprised if you’re invited to leave.” To the unasked question that was plain on her face—why are *you* welcome?—he offered only: “New job.”

Corinne followed him up two decks to the summit meeting. The usual suspects were mostly present: Carlos and Art; Maj. Kudrin and a few of his senior people; K’choi Gwu ka and T’choi Swee qwo, looking comical in their borrowed human helmets. Ambassador Chung was conspicuously absent, probably lost still in depression. The judgmental presumption made Helmut stop and think. He gave himself a hard stare through a nearby sensor, and did not much care for the weary, defeated-looking guy who looked back. Shape up, he lectured himself. Screw up here, and you’ll have altogether too much time to rest.

One by one, Art distributed network keys for a secure meeting. When Helmut got his, he found human and Centaur AIs already linked in to translate. Corinne, as he had expected, did not get a key. She accepted defeat graciously, departing with a wry smile.

“Thanks, everyone, for coming,” Art said. Helmut felt he had gotten pretty good at reading Art, but his friend’s present mood was elusive. Helmut’s best guess was a trace of the defeatism he was battling. It wasn’t a good sign. “Here’s our status.”

A graphic materialized in the consensual view. It projected a kaleidoscopically complex amalgam of damage and repairs, known and suspected hazards, force dispositions of friend and foe, distributions of Centaur/photonic-controlled vs. Snake/biocomp-controlled ship’s subsystems. For the asking, one could access any non-Snake sensor for more detail in true or pseudo-colored representations.

“It’s all here for your review, but little of it is immediately pressing.” With a magician’s flourish, Art’s avatar dimmed all but a few details. “We’re stuck in the middle of Plan D. The drive remains stopped. We remain unable to send a ‘go’ signal to the fleet.”

Cyber-Kudrin wore a clean-and-pressed uniform real-Kudrin could probably scarcely recognize. “‘We remain unable’ doesn’t do the situation justice. Blowing up antennae to keep the Snakes from phoning home may have been a great idea, but now we’re in the same fix. These guys are quick-thinking—soon after we stopped the fusion drive, they went outside onto the hull and dismantled the rest. With the ka’s support, we began building an interplanetary-capable antenna array from supplies. A Snake raid destroyed it before it could be completed. If you want to call what we have a ceasefire, that was the biggest violation, with plenty of casualties on both sides. So we tried it again, in an area swept clear of all sensors. They raided soon after their last sensor went down. It’s clear they’ve figured out our plan, and that they can mount a fairly decent-sized attack with only implant-to-implant pre-coordination. We had no warning.”

In a manner of speaking, there was lengthy debate what to try next. Mood varied from participant to participant: indignation, desperation, resignation. Conspicuously absent, it seemed to Helmut, was any real conviction.

The latest thought experiment involved constructing a replacement radio—the Snakes could not suspect every minor electronics or photonics project—for use with an antenna in one of the otherwise useless lifeboats. If they could disassemble control panels quickly, for access to the antenna, and if they could run cables from the lifeboat to a power source in their domain of control and if the Snake troops did not move in quickly and if the message were very short....

Too many ifs. “Then the Snakes in the engine room pop a circuit breaker or two, and we can’t signal. Or they fire a missile or two into the lifeboat bay. Or—”

Helmut tuned out the fruitless arguments. Something in that concatenation of hypotheticals struck him as useful. “How long *is* the message?”

“Quite short, actually,” Carlos said. “The bare minimum is a codeword and a digital signature. Whatever intel we can add would be appreciated, but none is strictly necessary.”

“So no more than seconds, assuming it gets through on the first try. Good.” He took silence as confirmation. “There’s a transmitter the Snakes don’t know about.”

Carlos nodded. “The lifeboat from *Deep Throat*. I assume we can upload a message?”

“No problem,” Helmut said.

“The message has to be short, because the Snakes will stop the signal quickly. But is the transmitter powerful enough?” As always, Art cut to the chase. Which was appropriate, because the chase was overdue.

“Yes, but.” His bones could not judge acceleration to the last few percent of a gravity, but *Harmony* had been pulling close to one gee. It had kept it up for about a week before the tumbling trick killed the fusion drive. He guesstimated they were about two billion clicks from Jupiter, and outside the range *Deep Throat*’s lifeboat—drive and radio—had been engineered for. “Yes, because I’d expect some fairly sensitive receivers to be listening for us. But, only if we get the lifeboat out of the landing bay. Where it is, we’d be transmitting through lots of metal decking.”

Helmut let people digest that for a while. “The good news is I can remotely program the lifeboat to take off from the landing bay, to follow a course, and to keep transmitting.”

Kudrin eyed him appraisingly. “And the not so good news? That in a very short time the Snakes will scramble a warship or two and blow the lifeboat and its radio out of the sky?”

“No,” T’bck Fwa answered. “I’m the bad news. My sandbox is aboard that lifeboat.”

T’bck Fwa was alone with his thoughts. The little lifeboat containing his sandbox must have departed *Harmony*. He had been told a very brief separation would sever the tenuous ‘bot-to-’bot radio relay that had been the only external interface to his sandbox.

Much was on his mind. It was not in the Unity’s nature to nurture, or even to recognize, leaders, but he had long memories of interacting with humans. K’choi Gwu was a truly great leader.

Since the breakout, he had spoken extensively with members of the crew-kindred, but most of all with the ka. No one's experience gave evidence of human complicity. He had conversed as well with the humans, and especially with Hong-yee Chung, Carlos Montoya, and Arthur Walsh. There were gaps in knowledge among the generally secretive humans, and differences in understanding, but nothing to substantiate the conspiracy he had so long inferred. There were tales of bravery and sacrifice by both species.

If T'bck Fwa could, all these thoughts and more would have been sent to his progenitor on Earth. These memories could have been downloaded over the improvised network aboard *Harmony* to the humans and appended to the upload the lifeboat would transmit for as long as it was able.

There was the problem.

Every repetition of the core message—Come get us!—improved the odds for the crew-kindred and the humans who had attempted to rescue them. Any other communication, no matter how valuable, was an avoidable risk. So while he had downloaded all he wished to be preserved, his testament would make its way to Earth, and thence to the first T'bck Fwa, and thence home to the Unity, only if the crew of *Harmony* were saved.

Seventy-five seconds had passed since the loss of his connectivity, from what must have been a maximum acceleration launch. Without access to the little ship's instrumentation, he imagined that which could not be experienced. Launch without warning. A quick orientation using an unmistakable point of reference: the Sun. A maximum-acceleration course neither towards the Sun, and into suspected K'vithian jamming from the inaccessible engine room, nor in front of *Harmony*, and into view of its anti-space-junk lasers. Transmission after transmission. Evasive maneuvers to extend the crucial signal by a few more iterations.

Eighty seconds. He was hurtling through space without ability to experience what was happening. How far had he come? How near was the end? Would he know when the end occurred?

How much his patient researches had revealed. How much still needed to be reported. Holmes had said, "It is my business to know what other people don't know." If this last voyage were successful, and his downloaded memories preserved, then what he had learned would remain known.

Ninety seconds. Hurtling through space without the ability to experience what was happening. Logically, there could be no sensation, but he had a perception nonetheless. It was something T'bck Fwa had never sensed, could never sense, but it as though he were going over a waterfall.

Over the Reichenbach Fal—

* * * *

Human and Centaur floated side by side, amid the sighing of what Eva was willing to call trees, and the chirping of flying things that resembled neither bugs nor birds. Feathery leaves on some of the smaller plants were already turning brown and sere at their tips as the shallow layer of soil dried. Irrigation streams did not work in micro-gee, and crew with hoses could accomplish only so much.

“So it is done,” said K’choi Gwu ka. Joe used translation rules provided by T’bck Fwa.

It: the desperate, short-lived mission of the UPIA lifeboat. Within a minute of its activation, ‘bots on a forward deck had reported Snakes hurriedly disappearing into an airlock abutting the landing bay. Eva pictured them swimming down clear tunnels like the one she had walked in the other direction, into captivity. “It is done.”

“How then, do we know if the signal was received by your people?”

It was not a question in search of an answer, so much as a friend, a new but already dear friend, seeking assurance. Eva answered in that spirit. “We’ll know when help arrives.”

Or they would know when, after another few days, *Harmony* had drifted beyond the reach of any possible rescue.

* * * *

CHAPTER 42

The bridge crew sat at their posts or swam about calmly. Discussions were casual and inconsequential. The main status holo showed only a field of stars, Sol far brighter than any other, but shrunken to a point like any other sun.

That aura of normalcy was a lie.

Mashkith was off-watch and in his cabin. The on-bridge display omitted details not intended for enemy eyes, presumed observing through their increasingly ubiquitous sensors. A fast-approaching human fleet dominated his implant-mediated view. The armada had given chase at well over two gravities; they now decelerated for the final confrontation with equal seriousness. Nothing could stop their arrival within a few ship’s watches—even if its drive could be reactivated, *Victorious* could barely maintain one gee.

How recently it seemed he had smugly recalled the conquest of Gaul. I might have done better, Mashkith thought, to remember Rome’s decline and fall at the

hands of vigorous barbarians. Of all InterstellarNet species, humans were the most consistently aggressive—the most like Hunters—and hence always the most worrisome. One cannot choose one's neighbors, which was all the more reason to study them.

He sipped absently from a water bulb, reacquainting himself with a plan long-ago formulated. It had never been shared. Soon the time would come to make that plan known—after the impending battle, too, was won.

Rapid blows rattled his cabin door. He knew the impatient caller was Lothwer before bothering to check the corridor sensor. "Entrance authorization."

Lothwer swam into the cabin, twitchy with tension. He closed the door with a near-slam. "Permission for candor?"

Reticence was never Lothwer's failing. His candor would be argumentative, indeed. "Permission, by net only." Whatever Lothwer had to say—and Mashkith was confident he knew—would be unsuitable for human eavesdropping. Tiny, wireless sensors drifted everywhere about the ship.

"Decision overdue, Foremost. Fleeting opportunity. Immediate attack authorization necessary."

They had had this debate four times in the past two shifts. Mashkith agreed retaking the amidships could free crew from their present defensive positions for the coming space confrontation. Where they disagreed was on the consequences. How quickly could an all-out assault on the herd and humans retake *Victorious*? How serious would be the damage to the ship? How severe would be the casualties? Could they afford such a victory? "Lothwer, familiarity with Romans?" Mashkith asked.

Through clenched teeth came a reply. "No, Foremost."

"Human clan. Rulers over much Earth territory for many generations." Arblen Ems would have been better served had his tactical officer chosen to master his opponent's military history rather than chess. Before Julius Caesar was born, Greek armies invading southern Italy had won a great battle—at the cost of half their army. To the courtiers who would compliment the king on his great victory, Pyrrhus of Epirus had offered this: Another such victory against the Romans, and I am undone. "Pyrrhic victory unacceptable."

"Space battle imminent." Lothwer missed or ignored Mashkith's point. "Need for full warship crews."

Their fighters were above all else spaceship crew, not infantry. Ship for ship, Arblen Ems could decimate the UP forces—clan warships had proven that

already—but the impending conflict would not involve closely matched forces. The clan’s brief numerical superiority after the explosion of Himalia had been lost to delay. No ship, not even *Victorious*, could carry naval might to equal an entire solar system, and now a great fleet approached. He could rage against herd and humans for impeding their departure, but rage did not change facts.

One such fact was that, since Grandpa’s exile, the clan’s battles had been in space. The interior of this huge vessel was as much land as spaceship, and the clan had no recent experience in land warfare. The lack showed. A network of spy motes like that now spread throughout *Victorious* was within the clan’s ability, but he had nothing like it. Clan warriors’ combat armor was far inferior to that used by the humans.

Arblen Ems forces far outnumbered the human raiders aboard—but the price in casualties to prevail would be terrible. And then? Guarding the survivors would still require warriors. And if the humans and herd chose to fight to the death—what then would be the cost in clan lives? “Onboard assault unapproved. Requirement: your acknowledgement of my order.”

“Acknowledgement: surrender approval by the Foremost.”

“Immediate cessation of your insolence. Your obedience mandatory.” Changes would be made, as soon as the crisis had passed. “Now.” Into their consensual vision Mashkith pulled up a star chart. “Surrender not the plan. Instead: a trade.”

* * * *

The consensus among the special-ops folks watching the latest surveillance data was, “Huh.” Art routed a copy of the 3-V imagery through a holo projector for consideration by K’Choi Gwu ka. He had found her, as expected, in one of the park/garden/farm levels.

“I have not previously seen him in micro-gee.” She studied the image from many angles as a tiny Lothwer swam and shoved his way from corridor to corridor, round and round the ship. Other Snakes scurried from his path. “The facial expression, though, and the snarl are familiar. Whatever the reason, he is unhappy. That has never been good news for us.”

For what it was worth, Art went to pass along the warning to Carlos.

The Foremost had lost his courage, Lothwer thought.

It had not always been thus. Mashkith had once acted boldly. He had seized a great trophy, outmaneuvered all other clans to keep it, led Arblen Ems across the void, outwitted the humans to obtain the secrets of antimatter, and set the stage for

Lothwer's own great victories. But now, after just a few clan casualties, Mashkith hesitated to act. He was weak.

Lothwer rushed from corridor to corridor, brimming with anger, seeking in vain for relief through exertion. "A trade," Mashkith had said. Some trade. If the Foremost had his way, they would deliver to the approaching fleet all the rebellious captives and sufficient fuel to return to Earth in triumph. The Foremost was even prepared to provide the humans with an interstellar-capable lifeboat. This would all come without firing a missile or a photon. In return, Mashkith envisioned, Arblen Ems would keep the battle-damaged *Victorious* and withdraw to learn about farming.

Mashkith actually expected the human fleet to honor a deal and let them depart in peace! What if the enemy fleet accepted the hostages and fuel, and then insisted upon more? Any clan would raise its demands in the face of such weakness. "Acceptable outcome," Mashkith had responded to the challenge. "Removal of prisoners without further clan casualties or further damage to *Victorious*."

With a snarl, Lothwer launched himself into yet another furious circuit of the deck. *I cannot allow the old fool to treat abject defeat as strategy.*

* * * *

"Your action a rebellion," Mashkith netted. Before him, Lothwer floated erect and unrepentant. He had been insubordinately slow to honor the summons.

"My duty now at the front, not the Foremost's cabin."

"Defiance of my direct order." Mashkith evoked a holo from archived surveillance-camera data, and let Lothwer watch himself visit various storerooms. All were on the forward deck bordering the human-controlled region. The satchel Lothwer carried became less and less bulky as he progressed. "Explosions in three of these rooms. Pretext for your assault."

Lothwer fought back a blink-blink. "Inspection tour. Subsequent human attack validation of my suspicions."

"Ruptures all downward through floor." Do you think I am a fool? Explosives, had they been placed by the humans on the ceiling of the deck *they* controlled, would have burst upward.

"My action necessary. Our victory imminent." Lothwer made no attempt now to suppress the double-blink of condescension.

"Our casualties excessive and avoidable. Your action mutinous. Keffah now my tactical officer. My orders to her: disengagement of our forces from herd and onboard humans."

“And then submission to humans.”

“And then trade with humans.” Mashkith suddenly felt old. “If still possible after recent crew casualties. Potent appearance of our fleet essential to our negotiating position. Your confinement to your cabin, in immediate effect.”

“My leadership necessary for victory.”

How could Lothwer not see it? His disobedience might have cost the clan victory—although their concepts of victory surely differed. Could Arblen Ems still stage a sufficient show of force to instill caution in the approaching fleet? “To your cabin at once, Lothwer.”

“And after your ignominious surrender, Foremost?”

In his anger, Mashkith almost missed the expectant gleam in Lothwer’s eyes. “Your alternative?”

“Battle to the death, not surrender in shame. Glory and revenge. Greatness of Arblen Ems for all time in the memory of Hunters and humans and herd.”

Mashkith had devoted his life to the clan’s renewed greatness. To him, greatness meant accomplishment and influence and growth—with survival a precursor to all else. This twisting of his dream sickened him. “Guards,” he netted. “Confinement to quarters of Lothwer.”

He had failed as a mentor. He must not, and would not, fail the clan as its Foremost.

* * * *

“In the eye of the storm.”

With only the slightest of variations, that expression, like the twisting storms created by planetary spin, was shared by all member species of InterstellarNet. For most of his life, Mashkith could only observe great cyclones from his exile in the cometary belt. How strange it was to have crossed interstellar space to first experience one. How profusely his hosts had apologized when a parade in the K’vithians’ honor was delayed for a day by a hurricane that skirted Washington! How unnecessarily! Little did they understand how the experience had exhilarated him.

Great forces surrounded Mashkith again. The enemy fleet would be upon them by the end of the watch. The enemy combatants aboard *Victorious* were quiescent, but might be spurred to action at any time—and soon, if not already, the

fleet would reestablish radio contact despite the clan's best efforts to prevent it. The pressures had led his tactical officer, and perhaps others among the crew, to the brink of mutiny.

The eye of the storm: great danger from every side.

Had he sufficiently considered the danger from his erstwhile lieutenant?

Glory and revenge. What had Lothwer advocated? The exact words were recorded in Mashkith's implant. "Battle to the death, not surrender in shame. Glory and revenge. Greatness of Arblen Ems for all time in the memory of Hunters and humans and herd."

Great danger. Great forces. Lothwer. Suspicion others in the crew might also be on the brink of mutiny. A horrible possibility took shape in his subconscious mind—a possibility that became all too real when he discovered a bound and gagged guard inside Lothwer's cabin. Lothwer himself was absent.

Mashkith raced across the ship, hoping desperately to be mistaken.

* * * *

When all is lost, Lothwer thought, a grand gesture remains.

Did the Foremost think to hold *him* prisoner? Did Mashkith think to immobilize him through the mock respect of posting only a token guard? Perhaps. If either was true, that was but one more manifestation of weakness.

Those who had served under Lothwer aboard *Valorous* knew his worth. A netted request to a few loyal subordinates set him free. As, in its own way, *Valorous* would set them all free.

* * * *

Glory and revenge.

If Mashkith was correct, deadly force would be required to eliminate this peril. He could more quickly reach Lothwer—again, if he was correct—than he could overcome the inevitable questions and doubts of crewpersons asked to attack on sight one of their own. And any random crewman or—woman whose help he sought might turn out to be an ally of Lothwer.

Mashkith sped through the long corridors, ignoring the surprised expressions on those he jostled in his haste. His worst collision coincided with another of the occasional wobbles that continued to disable the fusion drive. Panting, he entered *Renown*, still docked where it had returned from the rescue of *Valorous*. The herd

lifeboat remained in the belly of *Renown*. And in the belly of that lifeboat remained enough antimatter to spawn a cataclysm.

Corridor surveillance showed Lothwer, carrying a bulky satchel, approaching the airlock whose flexible docking tube Mashkith had just crossed.

Mashkith triggered a release, and the docking tube drifted free of *Renown*.
“No closer.”

“Only a moment’s delay,” netted back Lothwer, his avatar insolent in tone and pose. His pack floated as he struggled to get into one of the emergency pressure suits stored by the docking bay.

“A sufficient delay.” Mashkith slapped the emergency power-up. He buckled himself into the pilot seat as fuel pumps pressurized for the chemical maneuvering rockets.

“No!” Lothwer stopped mid-change and slapped the airlock’s emergency override. Both hatches slid open. Lothwer jetted out with the escaping air, mouth agape, screaming to release the gases bubbling out of his lungs. He slammed into the hull of *Renown*, not far from its airlock, the bulging pack hanging by its strap from his hand.

The pumps were barely pressurized. They might suffice to make the engines sputter; they would not quickly move a warship. Mashkith fired the forward attitude jets anyway. An edge of flame washed over Lothwer. Mind to mind, he screamed.

The flames detonated the explosives in the satchel. Mashkith’s final thought, as he lost consciousness, was relief that the shrieking had stopped.

* * * *

New screeching roused Mashkith from his stupor. Vaguely, he decided, the noise resembled a vacuum alarm. The sound was too weak for a vacuum alarm, though, and it was fading fast....

He straightened in his seat with a start, fighting to undo the buckles he had just struggled to fasten. He screamed, open-mouthed, as Lothwer had moments ago. Mashkith’s lungs ached, and beneath their nictitating membranes his eyeballs felt on the verge of rupture by the time he had an emergency patch in place. As cabin pressure returned, he sprayed about liberally with a fire extinguisher. Then he checked status.

Renown’s nose had crumpled. Its co-pilot and astrogator consoles were reduced to sparking, smoking scrap. The pilot’s console was sufficiently operable to show a spectrum of alarms in near and far red. A glance through the main viewport

revealed *Renown* slowly recoiling from the docking airlocks. Crunching noises overhead proved a slight vertical component of motion that had not been visually certain. Scraping persisted as the ship continued its backward slide.

How long before the lifeboat's antimatter containment system failed?

The fifth internal sensor he tried imaged the interior of the scoop tank. The lifeboat Lothwer had dubbed *Valorous* had torn loose from its moorings and was in a slow spin. Its cockpit viewport pulsed with the painfully bright yellow lights used by the herd for its alarms.

* * * *

Art awoke instantly to the TEOTWAWKI alert from Mashkith. "Dr. Walsh, I cannot overemphasize the urgency of this communication. This translator derives from the one you call Pashwah. If that AI is not totally trusted by you, link in any you choose."

"Joe," Art netted. "Done."

"An act of suicidal sabotage has occurred. One of my crew." A smoke-filled cockpit pulsating luridly replaced Mashkith's avatar. "In the hold of this warship, the only fully fueled Centaur lifeboat, the lifeboat your people pursued, is about to lose its antimatter containment. It likely holds more antimatter than what remained behind to destroy Himalia."

"What can we do?" Frantically, Art sent a TEOTWAWKI alert to Carlos.

"We must get this lifeboat off *Victorious*, and far away."

"Why tell me?" A corner of his attention noted Carlos linking in. The flashing of the red lights was becoming stroboscopic. Hypnotic. But was it real or simulated?

"I am telling you so your fleet does not make the mistake of attacking me as I launch. My first show of good faith: About forty UP ships will be here within an hour by your reckoning."

"Forty-two ships," came Carlos' aside. His special-ops team had made direct contact not quite two hours earlier over UPIA spacesuit radios. "What's Mashkith up to?"

Carlos had asked the right question. "Why should we trust *you*, Foremost?"

"You have no reason—yet." His avatar made a circular head motion. "But without your trust we will all die. You have sensors on all decks. Have your translator report what I am about to announce."

An intercom boomed all around, in the shrill, warbling voice of a Snake. “It’s Mashkith,” Joe said. “That’s confirmed by voiceprint. The same announcement is being made on all decks.”

“What’s he saying?” Carlos asked.

“The Foremost is surrendering—but to K’Choi Gwu ka.”

* * * *

Renown grazed a docked scoopship before drifting out of the landing bay. Through the pilot’s viewport, *Victorious* loomed like a small world. No, it *is* a small world, Mashkith thought, and my whole clan is on it. Only I can save them.

But would the clan heed his words?

“Arblen Ems: Our deeds epic, our accomplishments larger than life, larger than the vastness of interstellar space. Sadly, courage and devotion not guarantors of success. The shortcoming all my own.” Who but himself could he blame for his misplaced trust in Lothwer, for instilling in Lothwer great tactical skill without the dedication to the clan to guide it?

They had come *so* close. Had *Valorous* not been detected after Himalia, or had Lothwer kept faith only a little longer, the clan would have escaped. Even now, but for Lothwer’s despair, they would all have *lived* with all the glory anyone could want. In the sense that thriving despite the hostility of others can be revenge, then revenge, too, would have been theirs.

At the last, the only lesson Lothwer had learned was to have a back-up plan. He had brought explosives, not relied upon activating the lifeboat’s interstellar drive to trigger catastrophe.

The humans are right not to trust me, Mashkith thought. They are right not to trust *any* Hunter—but unless he could inculcate trust now, all would die. “Clan mates, your bravery and sacrifice commendable. The time now for wisdom. Resources of this vast solar system too much for the most valiant Hunters. Attack imminent of great human fleet. Requirement now of your bravery and wisdom: recognition of harsh realities.”

It was the most critical speech of his life, yet only the merest fraction of his attention could be allotted to delivering it. A few attitude jets still worked, and sporadically a little of the flight automation. As Mashkith spoke, he struggled to reorient the ship. After each gentle nudge of his jets, the unmoored lifeboat within bumped yet again against some part of the hold. For the clan to survive, he must quickly move *Renown* far away. If one of the onrushing human ships merely

reduced its deceleration, it would be quickly upon him. And were it to attack....

“Clan survival imperative above all else. The consequence: this directive from me as Foremost of Arblen Ems. Immediate submission of all Hunters to the original Foremost of *Victorious*: K’Choi Gwu ka. Handover of all weapons to the ka and her crew.”

As *Renown*’s battered nose finally swung around to point outward from the Sun, away from the pursuing fleet, he began gently to accelerate. The lifeboat, with a soft crunch, came to rest against the stern of the tank. Its cockpit was ablaze with yellow. How long did he have?

“Suicidal despair already by some. Result: the attempted destruction of all. The Foremost’s final duty: removal of this deadly peril from *Victorious*.”

He broke the connection to the ship’s intercom, but remained linked to corridor surveillance sensors. Throughout the starship, confusion reigned. Clanmates argued in groups small and large. Surrender without a fight was too foreign a concept to be easily accepted—and there was simply no time. “Dr. Walsh: ample reason yet for your trust?”

“In the presence of antimatter, trust is a fleeting commodity.”

Whatever that meant, it did not sound immediately threatening. “Withdrawal of this ship without interruption?”

How distant the time seemed when this human was the biggest obstacle to the clan’s success. Now the clan’s very survival depended upon Arthur Walsh’s bold thinking. A near-constant need for course corrections occupied Mashkith as the humans consulted. Its battered hull vibrating madly, *Renown* slowly accelerated and pulled ahead of the starship.

“The fleet will leave your warship alone,” Walsh answered, “for only as long as its course points away from them.” There was a long silence. “Foremost, I wish you luck.”

I wish us all luck, thought Mashkith. “Acknowledgement.”

* * * *

CHAPTER 43

The rapid descent of the central-core elevator in micro-gravity conditions had the effect of nudging its occupants upward. The core elevator was potentially compromised and remained off-limits—which meant that by using it, two insubordinate humans might reach the engine room before anyone could intervene.

At one level, Eva wondered whether they were already being observed by ubiquitous UPIA sensors. At a second level, she worried that the trembling of her hands on a handrail was visible even through pressure-suit gloves. Yet another part of her wanted to laugh at the irrelevance of both doubts.

If she started laughing, could she stop?

“Deck ninety-two: books, toys, and women’s shoes.” A nervous cough preceded Art’s feeble jest. “Deck ninety-three: umbrellas and hats.”

Mashkith’s plea for surrender was much remarked upon but little observed. The Snakes still controlled the stern and its all-important engine room. The UP rescue fleet had matched course and speed; at Eva’s impassioned pleading they were for now maintaining a goodly separation. Was it distant enough?

“Deck ninety-six.” Either way, the end of the line. “Engine room and dungeon. Pashwah-qith, it’s show time. Now that we’re safely down here, link in the ka, the Foremost, and Carlos. For now, they can only listen.”

Armed Snakes awaited as the elevator doors opened. She recognized none of them. “Take us to your senior officer.” She would have felt more comfortable using the mission’s translator, but to whom might Joe have confided? There was no time to answer questions.

Watchful guards escorted them into a great chamber dominated by vast engines. Outwardly, the fusion reactor and drive differed little from human norms. Other great machines were entirely alien. Antimatter containment, annihilation chamber, interstellar drive—she had once begged to see this room, and now she dared not waste time on even a long look.

“Who is the senior officer here?” Art demanded. “We have come in person, have put ourselves into your power, to emphasize the urgency and importance of our business.”

A familiar figure pushed forward, although the hesitancy on Keffah’s face was new. It was a tiny bit of good news: They were dealing with an engineer, someone who could grasp the problem. “That is the question, isn’t it,” Pashwah-qith translated. “In the engine room, I am senior officer. If Mashkith has left us, and if Lothwer is dead, perhaps I lead for the clan. Or perhaps the herd rules now.” She shook off the moment of uncertainty. “None of that brought you. What is the urgent matter?”

Eva took a deep breath. “We must eject the antimatter, immediately.” She pictured Carlos screaming in frustration as no one responded to him. How many trillions of Sols had that antimatter production cost? “It must not be aboard when the lifeboat explodes.”

“Without antimatter, the clan is trapped. What matter then that you two are my hostages?” The text caption for emotional content read: anguish. “Perhaps Mashkith has gone mad and Lothwer was a hero. Perhaps this is all a trick.”

A corner of Eva’s mind’s eye showed UP marines in full armor begin a frantic micro-gee scramble down stairwells—and then someone cut her access. Keffah’s eyes glazed, and she growled. Her sensors or soldiers must be reporting the same assault to her. She surely thought Eva’s appearance with Art was a ruse.

Suspicion and hesitation by any side would kill them all. “Keffah, you and I worked together. We both know what even a little antimatter can do. Your people still hold the bridge instruments. What do they say about the Foremost’s ship?” Several guards had raised their guns. Eva tried to ignore both them and the knot in her gut. “Keffah, when that fully fueled lifeboat blows, Himalia will seem like a wet firecracker.”

Blink-blink. “Still you do not understand. What destroyed Himalia was far more complex than one explosion.”

So there had been an interaction with the interstellar drive, as Art had speculated. It didn’t matter. They had no time! Gunshots and explosions could already be heard in the distance. What help could come of an armed break-in? The engine room contained a running fusion reactor and massive antimatter containers. “That lifeboat must hold tonnes of antimatter. The EMP will be huge! It will destroy the BEC containers on *Victorious*.”

“Nice try.” Keffah gestured to the guards. “Lock them in a storeroom somewhere. If you find time, bring them oxygen bottles occasionally.”

* * * *

The instrumentation aboard *Renown* was mostly dead and wholly unreliable. The single factor operating in Mashkith’s favor was familiarity. This ship was of the same type as his last command. So very far away, he had obsessively studied, and still remembered, every feature, quirk, tradeoff, and design detail of *Defiant*. At least, since he had to diagnose and fly this dying ship by instinct, those instincts were sure and deft.

His twin difficulties, in maintaining a course and achieving a decent speed, must stem from related causes. Maybe a tank seam had given way, spraying high-pressure hydrogen into space. Maybe the reaction-mass pump had burst, and its shrapnel had ruptured the hydrogen tank. Either way, he was about to lose the fusion drive.

With what little attention he could spare, Mashkith followed the drama in the

engine room. Perhaps Keffah was right to disbelieve the humans. Electromagnetic pulses were a natural consequence of nuclear explosions—not that purposeful fusion bombs and antimatter accidents were exactly the same. Their clan, any clan, understood EMPs well and knew how to shield from them. With no confidence in the few remaining computers aboard *Renown*, Mashkith did not bother to guess the strength of the EMP from his imminent immolation.

His final duty was to get this accidental bomb, and any EMP it created, as far as possible from the clan. What happened thereafter was in the claws and hands and tentacles of others.

* * * *

So what in an engine room can prisoners touch to propel themselves? Apparently nothing. A firm shove in the small of Art's back started him moving. He hoped they remembered to keep their claws in. He hoped the storeroom in which they were about to be locked had lights.

EMPs didn't scare the Snakes. EMPs didn't scare the fleet. Maybe only sheltered techies panicked about EMPs. And then it hit him. "Pashwah-qith, let K'choi Gwu ka communicate with us."

Gwu spoke immediately. "What is this EMP?"

"A high-intensity burst of broad-spectrum electromagnetic energy, as a side effect of nuclear explosions," Eva explained. "You get an EMP when highly energetic photons slam into matter and eject a pulse of electrons. And matter/antimatter destruction produces extremely energetic photons."

Keffah made no comment. A guard gave Art another shove to speed his trajectory. No one seemed too concerned with how hard he was about to smack a wall—and in seconds or minutes, it could not matter to him, either. "Gwu, is *Harmony* hardened against EMPs? Are the BEC containers protected?"

"Why would they be? The Unity has never made nuclear weapons."

"Bring them back!" shouted Keffah, just as Art bounced off the wall. Pashwah-qith's caption read: stunned realization. "Ka, can the antihydrogen be vented safely?"

"Yes. The containment vessel abuts the main hull. With an emergency hatch open, only electromagnetic containment separates the BECs from space. An asymmetry is introduced into the magnetic field. That creates a magnetic tube and propulsive gradient. The antihydrogen diffuses into the vacuum."

Art put out a hand to catch himself on a passing workstation. "Keffah, we

have a *lot* of antimatter to purge.”

“And a fusion reactor to shut down as well.” Keffah shuddered.

“Everyone,” Gwu said. “The antimatter purge and reactor shutdown are automated. Once you initiate them, they will complete on their own.

“Get them started and start running for the bow—now!”

* * * *

Mashkith discovered he was shivering. Soon after, as his breath began to condense before his eyes, it hardly surprised him that temperature control had failed. Considering the extent of the damage *Renown* had sustained, he counted himself fortunate to have cabin pressure. He struggled into a space suit now for its insulation and electric heater.

The bridge grew ever dimmer, as alarm LEDs transitioned from dire far red to even more ominous quiescence. His last view of the lifeboat’s bridge alarms, before the inter-ship data link stopped working, was a fiery yellow expanse too dazzling to view unfiltered.

The fusion drive had sputtered to a halt with *Renown* less than one-tenth light-second ahead of *Victorious*. Momentum continued to increase their separation at a pathetic rate. The rear attitude jets, before they exhausted their fuel, gave him a tiny bit more velocity.

Was this far enough away? Too little of *Renown*’s computing capability had survived to answer that question. Either way, Mashkith thought, my work is done. He hoped to the core of his heart that the clan would survive—even though things had not turned out as he had planned.

How strange a way to die, he thought. I won’t even know when it happens. And now I’ll never get to see—

* * * *

In an instant, *Renown* transformed. It became a blinding eruption of energy, very briefly the brightest object in the sky—for beings that saw gamma rays.

News of the explosion could travel no faster than the wave front that struck *Victorious*. In one-tenth second, the thirty-thousand-kilometer gap was crossed. The torrent of high-energy photons became a cascade of scattered electrons. Computers, generators, controllers, communications links, lighting circuits—anything that was still powered up when the EMP struck, died.

Roughly a gram of antihydrogen remained to be vented when the EMP killed the containment electronics. The resulting explosion, with a force comparable to the atomic bomb that once leveled Nagasaki, blew the stern off *Victorious*.

The remaining two-thirds of the hull were left tumbling violently.

* * * *

CHAPTER 44

Bone-weary, Art plodded along behind a squad of marines across *Harmony*'s vast landing platform. Imagined survivors still trapped in the wreckage, alone in the deepening cold and darkness, haunted him. As exhausted as he was, Art had ordered—and joined—search party after search party until the marines forced him to stop. It was too dangerous, they insisted, to stay any longer, despite the hundreds who remained unaccounted for. That so many more were almost certainly dead, their vacuum-boiled and bloated corpses blown into space, was too much to absorb.

He and Eva had barely escaped, saved only because they were already in pressure suits as they fled from the inevitable explosion. Even now, the memories sought to overwhelm him: Clinging desperately to each other and a bent segment of railing. The whistling air pouring through rips in the hull. The eerie absence of sirens, since all alarm circuits had been fried by the EMP. The terrified shrieks, fading with the falling pressure. The bombardment by the bodies of the dead and dying....

Eva walked beside him, a bit unsteadily; she had refused to leave *Harmony* until he did. The stars wobbled overhead, or so the starship's random tumbling made it seem. The world rumbled once more beneath his feet. "Hold on!" he shouted to Eva. Yet another section of the explosion-weakened hull ruptured, spewing gases and random flotsam into space. The magnetic soles of their pressure-suit boots were set to maximum, but as the ground shook, he clasped Eva's arm in a vise-like grip. *I won't lose you again.*

Deep pits and long, shiny gouges scarred the platform. He shivered every time they encountered a gash, for each was a crash site. UP warships crumpling into or careening off the starship's bucking deck had added hundreds more to the death toll. The pursuit ships were all EMP-protected, but they had run out of everything except weapons. They had a velocity into deep space of two percent light speed; their only possible source of deuterium/tritium and reaction mass for a return flight was the starship.

They marched toward the one ship remaining on the platform. The rest of the evacuation fleet had already launched. Fifty-three overcrowded vessels, some Hunter, some refueled human ships, had begun their long journey back to the warmth and light of Sol. No Centaur lifeboats joined them; like the starship itself, the lifeboats were unhardened against EMPs. Fortunately for the Centaurs, their

spacesuits were entirely powered down when the disaster struck, and so were unaffected by the EMP.

So many deaths, and yet dangers still lurked. Arblen Ems refugees had once fled into exile in a cometary belt—and from there staged raids on their enemies. Might they do the same in Sol system? The risk was unacceptable: UP warcraft on the flanks and rear of the flotilla would destroy any ship that wandered from its assigned course.

At last they reached the waiting UP cruiser. Art and Eva shuffled up the ramp and into the inviting airlock of *Actium*. A peculiar keening startled Art as the inner door cycled open. He looked wildly about for its source, only to encounter the eagle-tattooed and smiling face of Capt. Aaron O'Malley. An honor guard standing stiffly at attention lined both sides of the corridor.

The bosun's whistle cut off abruptly. O'Malley gave a smart salute. "Welcome aboard, Ambassador. Doctor Gutierrez."

Art popped off his helmet. "You can't believe how good it feels to be back."

Actium launched moments after O'Malley, Art, and Eva entered the bridge. They watched in silence as what remained of the abandoned starship, still tumbling about three axes, still jetting gases randomly as more and more of the traumatized hull gave way, receded into the distance. Its farms and parks were dying or dead, its emergency fuel cells were exhausted, its stockpiles drained. The shattered, hemorrhaging wreck seemed neither victorious nor harmonious, only sad. You were a fine ship, Art thought. You deserved better.

He found Eva an empty seat on the bridge, then claimed another for himself. His eyelids drooped. The purposeful sounds of bridge operations washed soothingly over him.

Someone cleared his throat loudly. Art forced his eyes open.

"I *said*, Art," O'Malley said, "that there's a cabin waiting for you. Your work is done. Go get some sleep. We're pretty full this trip, though, so everyone is doubling up."

Art turned toward Eva and found her already looking at him. They shared a nuanced glance which said everything that needed to be said. "That won't be a problem," Art replied.

"Now, let's go home."

* * * *

EPILOGUE

CHAPTER 45

Ariel Colony: the United Planets protectorate inhabited by the Snake residents of Sol system (see related entries, *Harmony/Victorious Hijacking* and *Himalia Incident*).

No matter how aggressive or territorial a civilization, to be self-sustaining most of its members must make something other than war. In historic times, no more than ten percent of any K’vithian clan were ever warriors; fewer than five percent of the clan Arblen Ems survivors of the *Himalia Incident* were. Few combatants bore any responsibility for setting clan policy toward humans or Centaurs.

Most K’vithian evacuees were, by human standards, civilians: children, workers and administrators, infirm, and elderly. Although some evacuees might justly have been treated as prisoners of war, all were homeless exiles. Many became refugees long before *Harmony* first approached Barnard’s Star.

Thus, in the aftermath of the *Himalia Incident*, the UP victors confronted a diaspora more than a defeated army. Any policy other than genocide had to address that unexpected reality, and hope in time to inculcate among the K’vithian exiles respect for the rules, and ideally the values, of the United Planets.

As a first step toward the UP goal of integration, clan Arblen Ems was settled for orientation and rehabilitation on a middling moon of Uranus: *Ariel*.

—Internetopedia

* * * *

Arblen Ems Firh Glithwah, Foremost, as she always did upon entering her office, took a moment to study the desolate topography outside the well-insulated windows. Her view to one side was into an ancient crater, and to the other side, into a deep ravine. The gorge was but one minor example of the many interconnected valleys extending for hundreds of kilometers across the surface. On this face of the tidally locked moon, Uranus dominated the sky.

Ariel was half rock, half water and methane ices. Some of the scattered craters, including the one upon whose rim this settlement perched, had been made by large metallic meteors. Deuterium/tritium scooped from the beautiful blue planet that hung tantalizingly overhead satisfied all their energy needs. And therein, despite the abundance of resources, lay the problem—the clan was permitted no ships. That prohibition was what made the “protectorate” a prison.

The human norm for an office demanded a desk, and so her office had one. She did all her work and kept all records in cyberspace, securely encrypted.

Everything on the desk, like the desk itself, was mere decoration. Be truthful, she told herself. Some items were sentimental, like the hand-carved wooden chess set. It was one of the few items salvaged from the *Foremost's* cabin before *Victorious* had been abandoned.

What would Uncle have said of their situation—besides that chess was simplistic and limiting? She missed his guidance, never more so than when unwanted guests arrived. Yes, she had become, as had her uncle and great-grandfather before her, the *Foremost*—but however confidently she presented herself, she took her responsibility as proof mostly of the clan's heavy casualties. Did anyone ever feel ready?

In minutes, ready or not, she had visitors.

* * * *

With no more exertion than the occasional flexing of a boot sole or the feather-light press of fingers against a wall, the man known to everyone on Ariel as Carl Rowland propelled himself through the unusually crowded main corridor of Customs/Security. That effortless grace was the product of extensive practice; he had lived here for many years. None of the gawkers paid him any attention, which was fine with Carl. All eyes were on the woman he escorted, whom he had greeted at the Customs lounge with a bear hug.

Ten years after the linked destructions of *Himalia* and *Harmony*, Corinne Elman remained among the most recognized beings in the solar system. Her 3-V docudrama about battle aboard and escape from the starship was a bestseller in *two* solar systems—and probably in others from which sales figures had yet to arrive. Had she not assigned ninety-nine percent of her royalties to victims' families and survivors of *Himalia*, she would also have been not just wealthy, but fabulously, stinking rich. The only thought passersby gave to him was surely: How does *he* know *her*? They would never know the answer: as Helmut Schiller. That name, and the face that went with it, were buried. Who better than the UPIA to convince the world the Frying Dutchman in all his reincarnations had finally died? Who better to give him a new identity?

On the home/prison world of Arblen Ems, even the rich and famous, even friends of the normally dour deputy of the UP's viceroy, underwent the full security protocol. Corinne and her luggage were X-rayed, chemically and biologically scanned, and hand-searched. She took it in good spirits. "It's great to see you."

And how unbelievably good it was to see her. They arranged to cross paths every year or so, but never before on Ariel. "Welcome to my world, shipmate. When we're done here, I'm buying you the finest breakfast on the planet and giving you the grand tour." Neither commitment was as generous as it might have sounded, especially the breakfast part. Ariel offered two human-safe restaurants and a staff

mess hall. “Then we can tend to your interview.”

He should have known better. Soon after their meal, they were in the terrestrial-conditioned side of the Foremost’s spartan but spacious office. Carl understood clan-speak, of course, but only someone with two independent sets of vocal chords could speak it fluently. Firth Glithwah as a matter of principle conducted business only in clan-speak. Pashwah-qith would handle the translations.

“Thank you for seeing me, Foremost.”

“You are welcome, Ms. Elman.”

“Corinne. I congratulate you on your recent ascension to this position.” They traded courtesies a few times; long, by Snake usage. “You know why I asked to see you.”

“To share your wealth with those who made it possible?” Pashwah-qith’s closed captioning added, “Sarcasm,” faster than Carl could net, “She’s joking.”

“Because your uncle was Foremost when the hostilities occurred. Because you can now combine what you might have heard as his closest surviving relative with records possibly only available to someone in your new position.”

“I see.” Glithwah did the ironic-laughter head circle. “All will now be revealed.”

Somehow Carl doubted that it would.

* * * *

Glithwah had been Foremost for months. Corinne’s answer notwithstanding, the obvious reason for this interview was an upcoming “event”: ten human-standard years since the destruction of *Victorious*. Humans fixated on anniversaries, which provided this human yet more opportunities to profit from the clan’s misfortune.

Whatever the impetus, human curiosity was always a danger—the mental leap was too short from analyzing old motives to speculating about new ones. Glithwah strove always to keep the clan’s captors fixed upon rehabilitation, on reinforcing their wishful thinking that acculturation was progressing. It mattered not that she preferred to avoid questions altogether; declining interview requests could itself raise suspicions.

This reporter had good cause from personal experience to be skeptical. She also had a huge human audience, and apparently the ear of UP security. It all made her dangerous. Could Glithwah mislead as adeptly as had Uncle? “Your questions, Corinne?”

“When Mashkith surrendered, he did so to K’Choi Gwu ka. Why was that?”

Because we had just killed thousands of humans. And because the Unity, unlike the UP, never had a death penalty. Surely this was obvious? “A sudden decision at a very desperate time. Reasons lost with Foremost.” Glithwah allowed the repositioning of an excavation rig deep within the crater to distract her for a time. “Absence of data. Very regrettable.”

“Was surrender to the ka in recognition that the ship was Centaur? Might Mashkith have been making deathbed amends?”

“Perhaps, Corinne.” Certainly not.

“Let me preface my next question with an observation.” Corinne interlaced her fingers. “Imagine the lifeboat hijacking had gone undetected. The lifeboat rendezvoused with *Victorious*. *Victorious* set off to Barnard’s Star, fully fueled. My question is: then what?”

“A very broad question.” And a perilously perceptive one.

“Not really. Put another way: Could Arblen Ems possibly have prevailed once it arrived home? News of *Victorious*’ appearance in Sol system returned home at light speed. Your own return would have been at, what, a third that? Long before Pashwah was quarantined, she must have sent word of your arrival in Sol system to the Great Clans. The UP’s trade agent on K’vith would have, too. The other clans had ample time to prepare for your eventual reappearance.”

Hunters do not fidget—especially not a Foremost. When Glithwah picked up the black queen from the chess set, it was quite intentional. It was a subliminal suggestion to her visitors: Think chess. Trust in predefined constraints. Believe in the polite and predictable taking of turns. Think inside the box. “Plentiful antimatter in our control. Opposition to clan Arblen Ems too dangerous.”

“He may have intended divide-and-conquer tactics,” Rowland said. “Ally with one or a few powerful clans more interested in their own welfare than in solidarity with the other clans.”

Her thumb stroked away. Think chess. Think boundaries. Uncle had devoted years to strategy; did they think to penetrate his subtlety in minutes? Why should she instruct them? “Without insight for you. My apologies.” Get bored with this session, please.

Besides, it was a novice’s analysis. The risk of betrayal would have been apparent to the Great Clans for as long as they awaited *Victorious*. Exchanging hostages and co-locating key assets were time-tested countermeasures. There were

many such possible dependencies to discourage treachery from within their coalition. Did the humans think Mashkith so desperate or imprudent to bet everything on hopes of undermining an alliance?

Conjectures flew. When Glithwah could, she left the humans to rebut and confound each other. Her most common reply, when pushed to speculate, was the pleading of ignorance. In this manner, they discussed without resolution: Would antimatter weapons used freely destroy the value of the conquest? Could antimatter weapons used sparingly overcome vastly superior numbers on the other side? Might the opposition clans' leadership exhibit Lothwer's death-before-dishonor fanaticism? How in each case might Mashkith have responded?

The question about Lothwer cut deeply. She pleaded ignorance once more, this time honestly so—she had been merely a deprived child of exile when the flight to Sol began. Let them believe Lothwer's weaknesses were more typical than Mashkith's devious brilliance. Glithwah's sincerest and never expressed worry was whether she had inherited the Firh family talents—or the family flaw of overreaching.

Rowland refused to drop the topic. "I don't see Mashkith embarking upon a strategy that involved a bloodbath. It doesn't fit what we know of him."

That was insightful—and hence, bad. It would not do for the UP security officer to understand. "Omelets versus eggs. Human metaphor."

He shook his head. "Mashkith was scary smart, but not a mass murderer. He might have threatened to attack major human settlements, even Earth itself, with antimatter—especially after he was the one holding all of it. He didn't."

"He didn't hesitate to destroy HIMALIA without warning." Corinne's hands trembled a bit, still enraged after so many years. "In the end, how many thousands died from that decision?"

Himalia had been a top secret, officially undisclosed, military research facility. It was a legitimate target. For the families who had lived there, and all those lost in the aftermath, Glithwah was sorry as Mashkith had been—but the humans themselves provided an appropriate term: collateral damage. As for warnings, even among humans, declarations of war were a quaint and often discretionary concept.

She articulated neither justification, for human misunderstanding suited her purpose. Forgive me, Uncle. "Himalia: evidence of Mashkith's single-mindedness. Implication: his readiness for application of antimatter until total victory on K'vith."

As inaccurate and unfair to Mashkith's memory as that impression was, Glithwah was relieved when her visitors departed espousing it.

* * * *

CHAPTER 46

Twenty years lost in suspended animation, twenty years stolen as prisoners of the Snakes, thirteen years gone to the construction of a new starship and the new antimatter factory to produce its fuel ... Eva sympathized with the Centaurs who chose not to spend many more years to return to the Double Suns. She had worked alongside enough Centaurs to know what a wrenching decision it must have been for a crew-kindred to sunder. Those electing to stay were made welcome anywhere they chose in the solar system. They had chosen to settle here.

The Australian Outback was breathtaking.

Achingly beautiful vistas beckoned wherever one went: vast stretches of desert sand and red sandstone, rock pools and wetland wilderness, towering rock formations and great canyons. Here one encountered boab trees with their immense trunks; there, groves of old-growth mallee, each dense thicket but a single ancient tree; yet elsewhere, great stands of eucalyptus and river red-gum trees. Everywhere there were fabulous animals: crocodiles and emus, koalas and wallabies, kangaroos and wombats and platypuses. And at night, one of the brightest sparks in a crystalline sky ablaze with lights was Alpha Centauri. It was all wonderful and eerie. In its ecological wholeness, it was more novel to Eva than to the Centaur friends who took delight in showing it to her.

She hoped to find their home world as fascinating.

“Are you sure you want to do this?” Allyson Walsh was taller than her father. Her hair and complexion were as dark as Art’s were Nordic. Spend ten minutes with her, though, and Art’s influence was palpable, even without knowing the young woman was an engineer. Eva and Allyson were strolling in the deepening dusk along the great salt flat that was Lake Torrens.

“This,” was a broad concept. Being a part of the first human expedition to another star. Observing firsthand the operation of the first human-built starship. Guiding the program of physical measurements and interstellar observations along the way. Collaborating at their destination with the Unity’s leading physicists—those whose insights had made the ship possible, whose quantum-gravity theory she was only now beginning, she flattered herself, to fully grasp. Cultivating the still delicate relationship with humanity’s nearest neighbors. Accompanying home good friends. “This” was all those things.

Twenty meters ahead, Art walked side by side with his son Bart. It was an evening for goodbyes, which was the true significance of Allyson’s question. “This” also meant thirty years absence from everything Eva knew, and from almost everyone she knew, including her stepson and—daughter who had come down from the moon to see them off. “Am I sure? Hell, no. But what an adventure it will be.”

“And of course there is no stopping Dad. I’m glad you’ll be together.” Allyson cocked her head. “Although how Dr. Claustrophobe plans to handle fourteen years each way cooped inside a flying pebble is a mystery to me.”

“Believe me, I’ve asked him that. After the tenth try, I got a credible answer. Art said, ‘Life within a fraction of a cubic kilometer of rock *will* get to me. When it does, remind me that just outside are trillions of clicks of emptiness in every direction. Remind me we’ve all been forced until now to spend our lives trapped in one little solar system.

““A galaxy should be roomy enough even for me.””

* * * *

Hard ceiling rails and padded bucket seats; potted ornamental dwarf bluefruit vines and no-nonsense holo status displays; photonic and biocomp components commingled beneath the sculpted plasteel panels of control consoles ... here on the bridge, the collaborative nature of *New Beginnings* was unmistakable. The ship soon to take them home was a joint effort with the United Planets. Not for the first time, Gwu thought how auspiciously named was the human polity—and how different everything would have been if Sol had been *Harmony*’s chosen destination.

“I never thought we’d get here.” Art Walsh floated nearby, at more or less right angles to Gwu, a big smile on his face. “It’s been a long time coming.”

Not nearly as long as for the crew-kindred, many of whom bustled around her tending to last-moment details. Too long, in fact, for many. Gwu could openly admit to sadness at the coming separation; she shared only with Swee her touch of envy. How wonderful it would have been to stay and explore. But for all the temptation, her commitment to duty never wavered. She would bring home everyone who wished to return. “Great rewards merit great efforts.”

“Fair enough. Be right back.” Art shoved off to consult on yet another calibration check of the main comm console. All around her, small clusters, more often humans and crew-kindred together than groups of either species alone, murmured purposefully.

In a saner universe, the main holo would have celebrated nearby Saturn in all its ringed glory. Instead, that display presented the many warships swarming around *New Beginnings* and Prometheus, the little moon on which their antimatter had been produced.

Eva Walsh-Gutierrez and Swee emerged from the central-core elevator, back from inspecting the engine room. Swee swung gracefully from rail to rail to rail, stopping at Gwu’s side. “We can fine-tune forever. My opinion is we leave now and

putter later.” He entwined a tentacle in one of hers. “What says the ka?”

“That she is eager to see the Double Suns again.” She called out to all on the bridge, “Stations, everyone.”

Gwu polled: power, propulsion, comm, navigation, trim and spin, ecosystems, logistics. Everyone was ready. Art and Eva settled into human chairs to one side of her. Swee took his place on her other side.

“We did it, you know,” Swee said. “Nothing happened as we expected, and too many were taken from us—yet we did everything and more that we set out to accomplish. The technology is proven. We leave behind our first colony. We return home with new friends.”

“The birth of an era,” Art agreed. “We’ve been privileged to see the beginning of a true interstellar civilization, so much more than an interstellar comm network. A new order of things.”

Gwu had one final check to make. “System integration, what is our overall status?”

T’bck Ra’s synthesized voice was loud and clear. “Everything is operational and ready.”

“I ask everyone to observe a moment of silence for those who fell along the way.” As so many had, across so many light-years. Then, with a single joyous word, Gwu began their journey.

“Engage.”

* * * *

CHAPTER 47

Arblen Ems Firh Glithwah, Foremost, as she always did before leaving her office, took a moment to study the desolate topography outside the well-insulated windows. While she had labored, a bit more of the ancient crater had been disturbed in the never-ending quest for metallic ores. A little more of the moon’s icy surface had been strip-mined for precious volatiles. Another new edifice had begun to emerge in the distance, much of its structure made of the fused tailings from continuous tunneling and mining. We are prospering here, she thought, and the humans do not understand the consequences of that prosperity. They lack the long view.

Times were hard when Glithwah was little. Her parents worked two of three shifts to survive, leaving her often in Great-Grandfather’s charge. Few of those early memories were happy, but there were exceptions. One exception was

Great-Grandfather patiently introducing her to b'tok. "The game of Foremosts," he often called it.

Had she finally attained Great-Grandpa's standard? She would never know. He had died with most of her family, in a far-off crash into what would become known as *Victorious*.

Fifteen standard years ago *Victorious* had been abandoned, making today yet again a day of interviews. She picked up the black queen, which stood forlornly on a corner of her desk. She restored the piece to its accustomed place of show, blink-blinking. Chess was all about constraints. Everything in chess was bounded by sixty-four squares, the prescribed capabilities of thirty-two predefined pieces, a time limit. Despite all the vitality of their civilization, all their expanding wealth, all the upheaval wrought by the arrival of *Victorious*, human thinking remained, if not static, almost always short-term.

Mashkith had never shared his long-term plans with her. Perhaps Uncle had disclosed them to no one. Anyone to whom he might have communicated them had surely outranked her—and was doubtless among the dead. But she knew her uncle—and she, like he, knew to plan for the long run.

Many questions had been posed to her today. As always, a few topics were uncomfortable. As always, the humans missed the crucial point. Perhaps the matter was obvious only to those who thought dynamically: What if, during the long absence of *Victorious*, an at-home clan obtained antimatter technology? It might have been independently developed, or stolen anew from a second herd starship, or purchased over InterstellarNet, or even transmitted freely and vengefully to K'vith by those thirsting for retribution against Arblen Ems.

That risk alone precluded a return home.

The clan dared not go—and dared not remain—any place where vastly superior numbers held, or might obtain, technological near-parity. As certain as Glithwah was about anything in this universe, their initial course towards K'vith was misdirection. Mashkith would have changed course soon after *Victorious* receded beyond human observation.

InterstellarNet was a yellow-sun club; K'rath was the single red-dwarf star home to a member species. Mashkith had surely planned to take them to another nearby red dwarf. She guessed the star known to the humans as Lacaille 9352, more distant from herd, human, and Hunter suns than all those stars from each other. And if not Lacaille 9352, other red dwarf suns had been within their cruising range.

Thereafter, even if their new colony were prematurely observed, who would invest the decades and treasure necessary to pursue them?

Exploiting the uncontested resources of an entire solar system, the secrets of antimatter and the interstellar drive, and time, there was no limit to what the reborn Arblen Ems might have accomplished. Perhaps, in a few generations, even a triumphant return to K’vith....

A scoopship passed overhead, delivering essential energy supplies. A human scoopship. Only in her thoughts did Glithwah bare her teeth and growl. She could be under observation at all times. She acted accordingly.

Someday, the well-behaved, increasingly prosperous survivors of the Himalia Incident—or if need be, their descendants—would have the humans’ trust. Someday, the spaceships that frequented Ariel would be controlled and flown by Hunters. Someday, the clan would freely roam this solar system. And someday, another starship would come within their grasp.

Arblen Ems was twice before a Great Clan. It will be a Great Clan again.

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