



Crystal Structures

4

W A R N I N G
rated R for
violence, abortion,
non consent,
sex, adult language

Please note that this is a cumulative rating of the whole story.
Not every chapter includes material of all the offensive points listed above.

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...and countless other people nudging me on to finally publish this!
It took only about fifteen years.

A. Kniggenndorf

Crystal Structures 4

The weakness of good crystals was a mystery for many years, in part, no doubt, because the observed data easily led one to the wrong conclusion. Relatively poorly prepared crystals were found to have yield strengths close to the high value we first estimated for the perfect crystal. [...]

The poorly prepared crystal is hard because it is infested with dislocations and defects, and these interfere so seriously with each others motion that slip can occur only by the more drastic means described earlier. However, as the crystal is purified and improved, dislocations largely move out of the crystal, vacancies and interstitials are reduced to their thermal equilibrium concentrations, and the unimpeded motion of those dislocations that remain makes it possible for the crystal to deform with ease. At this point the crystal is very soft. If one could continue the process of refinement to the point where all dislocations are removed, the crystal would again become hard. [...]

There are then two ways of making a strong crystal. One is to make an essentially perfect crystal, free of all dislocations. This is extremely difficult to achieve. Another way is to arrange to impede the flow of dislocations, for although dislocations move with relative ease in a perfect crystal, if they encounter interstitials, impurities, or even other dislocations crossing their paths, the work required to move them can increase considerably.

[Ashcroft / Mermin: Solid State Physics p. 635f]

2088-09-20

BetaMountain
Office of Cmdr. Walsh
11:55

“Repeat that!” Goose’s response – tone, words, even posture – was a one-on-one repetition of Walsh a few minutes earlier. Between this and the night before, Niko wondered just how much influence the commander had had in Goose’s development.

“The Xeryon dream traveling technology is the precursor to the psychocrystals the Queen uses for her slaverlords,” she repeated. “The malfunction that trapped a small number of dream travelers on their tours apparently became their main function.”

Goose snorted. “Kinda too useful to be an accident.”

“You think Tortuna conquered the Xeryons by trapping them?”

“Nope. I think Tortuna *is* Xeryon after the Crown got rid of the disloyal opposition.”

“Beside the point,” the commander cut in, drawing their attention back to the briefing. “We have a tactical nightmare at our hands! The slaverlords aren’t just a weapons system. They’re the Queen’s eyes and ears and her means to control armada and empire! She’ll do anything to contain this information!”

“Well, we know the result of her last invasion.” Doc laughed uneasily. “Defeat by Buzzwang and coffee automatons¹.”

“She won’t invade.” Goose’s flat statement sent a chill of dread down Niko’s spine. “She won’t bother with fighters or ground troops. This is about erasing critical *information*, not more slaverlords and resources. She won’t keep the planet.”

“Hauling the amount of ammunition necessary for planet-wide destruction will take a lot of resources,” Zach said. “If we set up an orbital shield—”

“She doesn’t have to bring ammunition,” Goose corrected. “It’s conveniently waiting for her between Jupiter and Mars.”

“But an Andorian shield—”

“—only means she has to use bigger stones.” Goose mimicked tossing something into Walsh’s dustbin. “Got it? Fucking gravity’s on her side!”

“Language, Gooseman!” Walsh snapped. “Fox, shields work on the assumption that the assailant is interested in the planet or its inhabitants. The Queen must contain information that threatens the foundation of her power. Gooseman’s right. Annihilation is the most reliable way to do that.”

“*An unwanted planet is impossible to defend.*” Goose sounded as if quoting a lecture book.

Walsh ignored him. “QBall’s not done analyzing the device you seized from the dead spy yesterday, but given the combination of starstone and psychocrystal, we better assume the Queen was informed in real-time.”

“That means she knows we have a significant portion of the ancient Xeryon library and a working crystal reader to access it,” Niko summed it up. “But not that we already made the connection between the dream traveling and the psychocrystallization process. It might give us time.”

“Not much,” Goose said grimly. “She sent a *wired* spy right after discovering where Morron dug.”

“Indeed.” Walsh straightened. “A restraint likely owed to the armada’s significant losses over Tarkon. Nevertheless, we need firepower in orbit and near the asteroid belt. Any ship and personnel caught on the surface will be useless when the armada arrives. – Niko, I need a dossier detailing your findings for the Board within two hours. It’s to convince politicians, so forget about academic uncertainty and include pictures!” He opened the intercom. “Sheela. Get me QBall on a secure line, then

¹ See “Buzzwang’s Folly” (TV episode)

prepare a video conference with Blake and Subadar, and arrange for an emergency Board appointment.”

=Time frame for the appointment, sir?= came Sheela’s unperturbed voice from the speakers, accentuated by rapid typing on a keyboard.

“Today. Minimum in three hours.”

=Dr. QBall on line two, sir.=

=We couldn’t reproduce the crystal reader yet,= QBall answered Walsh’s first question decisively. =We can’t even give you an estimate how long it’ll take.=

“And if we spread the archive itself?” Niko suggested. “If we send digicopies of the crystals to Andor and Kirwin—”

QBall on the screen shook his head. =The data is linked to the carrier material via exotic quantum states. We can duplicate the matter, but not the quantum states. That’s the same feature—= He sounded truly annoyed. =—that’s keeping us from copying the reader. My techs consider it a kind of digital rights management.=

“What about analog copies?” Doc chimed in, raising his hand as if sitting in class. “Translation takes way longer than displaying the text, doesn’t it? Have some assistants or bots – *not Buzzwang*, I beg you! – handle the reader and take snapshots of each displayed page.”

=Do you suggest digital piracy?= QBall frowned.

“Do you prefer death-by-DRM? Literally?” Doc shot back. “Besides, it’s not as if a lost empire will sue us for copyright infringement even when you extract content in 24/7 shifts!”

QBall tilted his head. =It might work. We’ll need room for the other translators.=

“And tight security.” Goose looked at Walsh. “If Okalpa transmitted real-time, the Queen knows that there aren’t many able to read that stuff.”

“Worse.” Zach cut in. “The trial of Morron and his students was public. She knows where they are.”

Walsh cursed. “Fox, Hartford. Take Ranger-1 and bring the translators to Earth. Gooseman – Interceptor escort. The transfer papers will be waiting when you arrive at Deltoid. Go.” The men left at a run, while the commander returned his attention to Niko and QBall. “Niko, you have one and a half hours left to get me that dossier, afterwards help QBall prioritizing the information related to the psychocrystals for data extraction.” He nodded at QBall and disconnected the line before tossing Niko her badge. “Consider your disciplinary transfer ended. Have Sheela give you one of her weapons before leaving. I do not want you unarmed or Ms. Attalan alone on this base until we had time to do a complete sweep. Dismissed.”

When Niko left Walsh’s office, Sheela without looking at her held out a fully charged laser assault rifle, while speaking into the intercom, “Conference with Commander Blake and Admiral Subadar waiting for you on line 5, sir.”

Ranger-1 / Interceptor-7
approaching Deltoid

“Deltoid control. This is Galaxy Rangers Ship Ranger-1 and escort on approach vector 42. Requiring permission to land.”

=Ranger-1. This is Deltoid control. You are cleared for docking bay 3. Follow the guide lines. Director Locklear is expecting you. Deltoid control end.=

“Any idea what Lock-me-up expects from us?” Doc quipped from the copilot seat.

“Possibly a talk with you regarding her new nickname,” Zach returned dryly and opened a channel to the escorting Interceptor. “Goose, did you catch that?”

=Yes, Captain. Clearance for bay 3. Do you want me to land?=
=

"Yes. The archeologists are no threat until they have access to the archive and the Queen won't waste firepower on a fortified prison station when she can accost us in transit. Deltoids other inmates may be an issue, though. We don't know how firm director Locklear's control over them is."

=Understood. See you in dock, Gooseman end.=

Deltoid space station
League correction facility

"Don't worry about the belated papers, Captain Fox." Selma Locklear's heels made a firm staccato on Deltoids newly sealed floors. The station had seen some drastic improvements since she'd become director after the revolt, resulting in stricter security, better manageability, and absolute cleanliness. Even Goose's enhanced sense of smell didn't detect anything but steel polish, soap, and the slight tang of disinfectant and chlorophyll indicative of a closed-loop air recycling system. A vast improvement to his last visit here².

"You don't seem worried about the illness spreading to other inmates," Zach observed, playing along with the cover the commander had cobbled together while they were on their way.

"Frankly, Captain," director Locklear said dryly, "even if I bought that contamination bullshit – and that's a big 'if'! – I'm happy to have them off my responsibility."

"Did they cause trouble?" Doc asked, surprised.

"No, they *are* trouble, Ranger." Director Locklear snorted unladylike. "I'm responsible to keep the League safe from my delinquents and my delinquents safe from each other. And that group of brain trollops for sure isn't fit to mingle with the rest of my 'guests'!" She laughed humorlessly. "Finding separated accommodations and work for all of them without violating their rights and our security protocols is a nightmare. It's not as if I can keep them in single detention 24/7 or put them in my office to keep the books."

She stopped at a thick double lock, separating the cell blocks from the administration area and the docking bays. It opened only after she'd entered a long access code and performed a blinking iris scan, the latter was one of the changes she was famous for: it reduced the risk of personnel losing eyes and limbs in case of trouble. Then she radioed for one of the force field shielded doors to be opened.

"Here they are, rangers. Fourteen academics. All yours."

"Director Locklear." An elderly gentleman, whose orange prison suit hung loosely from his bony frame, stood when they entered the sealed wing. "Did something happen?"

"You're being relocated to Earth for medicinal purposes," Locklear stated coldly. "The Galaxy Rangers are responsible for the transport."

The old man's mouth formed a startled 'oh'. "I apologize for any inconveniences we may have caused, director. It wasn't our intention to—"

"You're their problem now, Morron. Not mine." She nodded at Zach to take over.

"Form a row and follow me," he ordered. "Goose, sideline. Doc, take the rear. The faster we're back on Earth, the better."

Director Locklear arched a brow. "You don't seem too concerned about getting infected, either, Captain."

"We've been to Tortuna often enough not to worry about some second-hand imports," Zach returned dryly. He made a circular movement at the flustered academics. "Move out."

"Gooseman-san." The quiet voice had him glance sideways at the petite woman as she crossed through the lock into the hallway between the forcefield-locked cells of the common block. "Is Niko on this flight as well?"

² See "Changeling" (TV episode)

Katsumi Nakawa, who'd refused the implant. Goose growled. "No, she's in disciplinary transfer for the shit you pulled."

Nakawa lowered her head. "I'm sorry. We only sought scientific—"

"Don't get me started on that idiotic expedition of yours," he bit off. "You'll hear about that early enough."

"Hey, Ranger-boy!" Macross's leery drawl came from one of the cells. "Nice tart! An improvement over the redheads! Care to share? Too bad you're out there and—"

"Hey, scumbag." Goose growled, casually sticking his fist through the sizzling forcefield into Macross's cell. "This keeps you in, but it doesn't keep me out. So, shut up or I'll do it for you." Nakawa had shrunk in on herself at the taunt, and now stared, frightened, at the white-hot fire dancing around his wrist. "Don't worry," Goose told her grimly. "I'm flying escort. You're going to spend the flight with the nice guys."

"Gooseman," Zach warned over his shoulder. "Stop dawdling."

"Coming, Captain."

Ranger-1 / Interceptor-7
approaching Earth

=Shields up! Looks like the party started without us! = Gooseman commed the moment their tiny formation returned to the standard continuum. =If your cargo needs convincing, tie'em up and let them have a look at the screens.=

"GV, tactical display." Zach frowned. The number of blips on the screen didn't bode well. Ship IDs started showing up in blue as the AI picked up transmissions, but too many stayed red – enemy vessel. "There are three large cruisers in outer system orbit," he noted, surprise warring with relief. "Blake's Laredo, the Comanche, and the Kiowa. How on Earth did the Board get in motion that fast?"

=What's the difference between a maneuver and a battle formation?= Goose laughed. =The position of the comma on the power display. Hard to see from the Hall of Earth.=

"You mean, the commander—?"

=—had the other brasses on speed dial for such a case.=

"We're lucky. The other standard reentry points are monitored," Doc reported from copilot, adding orange flags to a few dozen red blips. "The Queen doesn't like surprise guests."

=Correction.= The interceptor suddenly rolled away from Ranger-1, escaping a purple double blast scattering off its wing. = All SRPs are monitored. Ranger-1, ignore collision alert.=

"Goose—" was as far as Zach came before the screaming proximity alarms drowned him out. GV's blue-green eyeball pinpointed in fright as the interceptor whizzed, guns blazing, across the front section of Ranger-1 with less than an arms' length between the two cockpits. A breath later, debris prattled against the aft shields. The back screen showed the Interceptor diving through two expanding clouds of what had been two Crown fighters who'd used the hyperspace bleed from their reentry to cover their approach.

=More bogeys coming at 1800,= Goose stated over the comm. =Full wing.=

"Noted," Zach confirmed grimly. "Prepare for intra-system jump in close formation. Coordinates come once BETA and the carriers cleared a re-entry location in near orbit."

=Outer atmosphere?= the ST queried, sounding almost excited.

Zach's jaw worked at the suggestion. "Sub-geosynchronous orbit will do. Let's keep the binding of the book, if not its letters."

"BETA transmits coordinates," Doc announced, "relaying to Interceptor." He switched to intra-ship comm and announced cheerfully, "Dear convicted passengers, tighten your seat belts, take a protective position with your head between your knees, and kiss your gluteus maximus goodbye for an emergency hyperjump in three... two..."

Planet Earth
1.648 km above ground
Low Earth Orbit

"...oops, already done!" Doc's voice mingled with the screeching of an atmosphere contact close to shunt velocity. Beside him, Zach rapidly worked the controls, slowing them down while confirming that Goose's interceptor was still beside them. Satisfied, he noted that the smaller ship held its relative position as if they'd never left standard continuum. From the surface, they'd appear white-hot glowing, resembling nothing so much as the very thing Earth Force was working hard to prevent.

=Looks like Planetary Defense was told in time,= Goose commented once their speed had slowed to acceptable limits. =No deflector missiles—=

=Ranger-1 and Interceptor-7, this is BETA control. You're cleared for direct approach to hangar bay 1.= An electronic bleep followed. =A reproach for exceeding entry speed limits was added to your personnel files.=

=Just copy the other two-hundred,= Goose muttered.

"I wasn't even at the controls!" Doc protested.

Zach ignored it all. "Doc, take care of our passengers. We're setting down in five."

BetaMountain
Landing Platform, Bay 1

Walsh was waiting for Zach as he left Ranger-1 after putting the ship on stand-by. The ship, even if not with him on board, would be back in action soon. Zach saluted sharply. "The remaining members of the Morron expedition are all on board, sir. I didn't waste time finding the fluent speakers among them and just brought the whole group." He threw a glance back at the ship. "Judging from their behavior at Deltoid and on the flight home, they either learned their lesson well or the situation on Tortuna had severe disadvantages for Niko."

Walsh accepted his assessment with a brisk nod. "Ranger Niko's rank and position on your team have been restored, Fox, but for the time being her translation duty takes precedence."

In the next lot, Goose jumped down from the interceptor and immediately made a bee-line for them. Eyes trained on Walsh, he snapped at attention in front of them. "Request permission to join the fray, sir."

The commander considered that quite a while, making Zach believe the request would be denied, but "Permission granted. Report to the Kiowa. Not all of Subadar's squadrons made it to orbit. And Gooseman—" Walsh stopped the ST in his tracks. "Four to one. At most. If I learn that you made more than four shifts in a row, the armada up there will be the least of your problems!"

A broad grin. "Yes, sir!"

"Four shifts, sir?" Zach inquired quietly after the roar of the interceptor lifting off had ceased.

"He's an ST." Walsh shrugged. "I'd be surprised if he doesn't try to extend even that limit."

"Shall I inform the admiral that we're sending him a wild card?"

"Do so." Walsh took a deep breath. "I don't want to sugarcoat it, Fox," he said in a low voice, watching the landing platform of Ranger-1 descend with Doc and the lined-up archeologists in their orange prison garb. "We're buying time, and it's already damned expensive."

"What if the archive doesn't yield information we can use against the slaverlords?" Zach asked quietly, thinking of his children, of *Eliza*. "Will there be an evacuation?"

"Any planet accepting refugees would become the next target," Walsh replied. His firm voice leaving no room for negotiation. "But it will suffice to transmit the content of the archive independent of use. Earth is an original planet, a population center. Eradicating it has a high terror value and might well lead to the independent worlds uniting against Tortuna. The Queen won't risk that if she's got nothing to gain from it."

"A large 'if'," Zach said grimly.

"A tactical 'if'," Walsh corrected, watching the prisoners. "One that might save our asses once these fools get their thing together." He tapped his walking stick against the hangar concrete. "Help Niko settle in the translators then report back to me. I need every pair of eyes I can get. The Queen's got way too many options against us."

BetaLabs, Sublevel 3

One hour later

"Are all these MPs really necessary, Niko?" Professor Morron pulled out the chair beside hers and sat slowly, betraying his age. "And even you are armed to the teeth." He indicated her sidearm and the knife strapped to her boot, before again looking at the MPs lining the walls. "Certainly, we aren't deemed so dangerous as to require that much intimidation."

"Professor," Niko answered, struggling to remain calm while watching the other members of Morron's ill-begotten expedition finding their places around the table together with QBall and the technicians who'd worked on the reverse engineering the crystal reader. "The MPs are here to us safe. The Queen of Tortuna wants to get rid of whatever is recorded in the Xeryon archive, and she won't stop at anything to achieve that. We already caught one of her spies within BETA, but only after he killed Sven in a room on this very level."

The professor's face fell. "Sven's dead?" he asked.

"Yes," Niko confirmed. "And we don't have time to mourn. Since we can't be sure that the spy we caught was the only one, I'm not going unarmed, and I'm not asking the MPs to leave. Be happy to have them. Sven wasn't that lucky." One of the technicians powered up the holosphere in the center of the table. "None of us will be alone at any given time until this is resolved. Not for a single moment," she stressed.

"Not even in the restroom?"

"Not even there. We're working against time." She caught his eyes, making sure he understood. "We need to know what the archive contains about dream traveling devices, the malfunction, and – most importantly – the countermeasures. If we spread that information, the Queen has no longer anything to gain by destroying Earth."

"Can she do that?" Morron asked quietly.

"Yes, without a doubt." Niko squared her shoulders. "Right now, my colleagues, my *friends* are fighting, *dying* to delay her so that we have time to find the information. So please, don't let their sacrifice be in vain."

2088-09-22

Two days later

"—the dream traveler wearing the first crystal had control over the movements of the second crystal. Sensual perception was channeled through the entangled crystals, resulting in the dream traveler being able to see, hear, and smell the environment in which the twin crystal resided. The texts are very specific in that regard." Professor Morron sounded excited. "The technology is a marvelous achievement, explaining a lot of Xeryons' exploration prowess, and—"

"Professor," Niko cut in. "We already know that it was not always in the jurisdiction of the dream travelers to end their tours and that the Xeryon authorities were aware of that risk. Otherwise, dream traveling agencies and mandatory medical observation wouldn't have happened. Did you find anything related to these?"

“Yes.” Morron nodded repeatedly. “It appears the problem is the limited storage capacity of the brain. The information gathered by the second crystal in the distance is stored as memories, and there are very strict warnings not to exceed the maximum time for a dream travel because otherwise the brain would suffer serious information overflow, resulting in a severe stroke.”

QBall tossed his light pen onto the table. “That’s close to what we see happening to those dying in the Psychocrypt, but it doesn’t help us in the current situation. Is there anything about how the traveling process is monitored and interrupted in case of malfunction?”

BETA command center

“Sir, we have orbital changes in the Hungaria asteroid group³.” The operator called the monitoring diagram of the asteroid belt onto the main screen, marking the atypically moving celestial bodies in bright red. “64 Angelina⁴ and 55 Pandora⁵ are definitely on a new trajectory into the inner system.” She marked the two bodies in the 3D star chart and added directional vectors. “We also have smaller changes in orbits even further into the belt.”

“Magnitude of acceleration?” Zach studied the display with narrowed eyes. The armada had arrived less than three days ago, for the orbital changes to be detectable already—

“Not enough data yet, sir.”

“Transmit the coordinates to the carriers,” Zach ordered. “They have to intercept the bodies before they enter an earth-bound trajectory and are sped up with a weak hyperfield.” He stilled frowned at the tactical display. Something was off, but he couldn’t put his finger on it. The Hungaria asteroids were among the innermost asteroids in the main belt, so it made sense to use them rather than something deeper inside the turbulent region, but still they were past Mars. “Any activities among the Amors⁶ or the Earth-crossers⁷?” he asked.

“No, sir.” The operator shook her head. “But EAS 1 to 4 keep track of them, as does the Spaceguard⁸.”

Asteroid Belt
64 Angelina

Goose watched the twisted surface rushing past his interceptor. Even this far out from the sun, black shadows marked every sun-side rock protruding from what was cataloged as 64-Angelina since the 19th Century. Three purple flares regularly firing on its dark side marked the position of the engines, pushing the fast rotating, irregular shaped body sunwards toward Earth.

“This stinks,” he growled into the comm and turned over his wing towards the twisted surface. “I’ll take a closer look.”

³ Hungaria asteroid family. A group of asteroids orbiting the Sun between 1.78 and 2 AU with low eccentricity (< 0.18) and inclinations between 16 and 34°. They are E-type asteroids, having atypically bright surfaces with a high content of MgSiO₃ (Enstatite; hence “E-type”), which led to the assumption that they originate from the mantle rather than the core of a differentiated astronomical body, such as a large asteroid.

⁴ 64 Angelina. Main-belt asteroid, E-type, irregular shaped 60 x 53 x 45 km (based on Shepard et al., doi: 10.1016/j.icarus.2011.07.027).

⁵ 55 Pandora. Main-belt asteroid, E-type, diameter 66.7 km, rotation period 4.8040 h.

⁶ Amor asteroids. Near-Earth asteroids with orbits that approach Earth from beyond but do not cross Earth orbit into the inner solar system. 3.729 Amor asteroids are listed by the JPL Small-Body Database as of June 2013.

⁷ Earth-crossers. Near-Earth asteroids with orbits that cross Earth orbit. These include the Aten and Apollo asteroids, the latter of which are thought to be the origin of the Chelyabinsk meteor on Feb 15, 2013.

⁸ Spaceguard Foundation. See <http://spaceguard.iasf-roma.inaf.it/>

=Negative, Wildcard!= His wing leader's sharp command cut through the com static. =We're to take out the engines and not risk their ack-ack until the carriers arrive—=

Goose entered the narrow cone of radio silence below the horizon and shrugged. Angelina's pale surface rushed past overhead, the change to night instantaneous without an atmosphere. Silicate-rich rock glittered white in the search beams of the interceptor. The enemy engines whizzed past, lined out with black shadows in the bright light reflected from the surface.

Heavy-duty machines. *Sub-light only.* Gooseman cursed. He didn't even bother to shoot at them before he activated his Hypercom, ignoring the chain of command, radio-silence, and likely a gazillion Space Navy rules he'd never bothered to learn in the first place. "*Wildcard to Kiowa!*" he barked the moment the carrier channel signaled contact. "*Decoy! I repeat: Decoy! Angelina's bait!*"

LSS Kiowa
heading away from Earth

"Wildcard? Who's that?" Admiral Frederic Subadar, hands folded behind his back, asked the flustered communications officer.

His first officer answered instead, "a transfer from BETA. One of Walsh's specialists."

"I want fly-overs of the other targets," Subadar ordered without looking away from the tactical overlay on the main screen, showing position and vectors of the critical objects. "Query Comanche and Laredo for the closest teams."

=Reaching shunt velocity,= KIOWA announced ship-wide. =Prepare for hyperspace in ten after signal.= The ascending cadence of the hyperjump countdown filled the wide bridge along with every room and corridor on the large carrier as the AI began counting down. =Ten... nine...=

LSS Kiowa was of the same class as the Laredo. 12,000 men and women served on her, although she was now operating with a skeleton crew of a thousand due to the emergency departure.

=Eight... seven... six...=

"*Decoy!*" Frederic Subadar felt himself gnawing on his back teeth. "*Repeat: Decoy!*"

=Five... four... three...=

"*Angelina's bait!*" Angelina was a bright E-type asteroid on the inner edge of the main belt. All asteroids moving toward Earth were E-types...

=Two... one...=

"Abort jump!" he barked, giving in to his hunch.

"Hyperjump abandoned, sir."

Satisfied, Subadar noted that his first officer's expression did not show her surprise over her admiral's irrational behavior. "Inform Blake and Antonova that we're staying put. And get me Wildcard on the com."

Interceptor-7
above 64 Angelina, asteroid main belt

"Sir, those engines have no hyperspace capability," Goose answered the admiral's inquiry briskly, "and no capacity to add it. Hell, they didn't even bother to stop the rotation. They just timed the engine bursts to push the damned rock on course towards Earth." He snorted. "It'll take more than a year for Angelina to drop on our heads. The Queen isn't that patient!"

=You are very confident to know the enemy's M.O., Lieutenant, to break radio silence on such a hunch.= Subadar's dark frown was somewhat diminished by the tiny dashboard screen, reducing his red-brown mustache to a blurred caterpillar.

"I was there when the information was discovered, sir. It's not in the Queen's interest to give us a year to decode it." Goose knew better than to budge. "Angeline practically sparkles! All E-types

do. If they wanted us not to spot them, they'd have used C-types⁹!" He drew a deep breath and risked it. "Sir, whatever's going to happen, it'll happen a lot closer to Earth. And all our heavy firepower was heading away from it. That couldn't be good."

The admiral on the tiny screen considered him calmly. "Who's your wing leader, Wildcard?"

"Guardian. Lieutenant Rosharraf, that is." Goose glanced at his controls. "But he doesn't like me much. Wing leaders take offense when being ignored."

"That's one way to put it," Subadar commented dryly. "Consider yourself warned. If— The bridge sirens and alarms going off on the Kiowa cut him off."

Twenty-seven minutes later¹⁰, Goose saw a brilliant white flare light up the vicinity of Earth.

BetaLabs, Sublevel 3

"—results in the formation of two spatially separate but quantum entangled crystals¹¹, the one in contact with the skin of the dream traveler—" Professor Morron blinked when Niko and several of QBall's people around the conference table winced. "Is something the matter?"

"No, professor. Reality just caught up with us," Niko said quietly. "Please, do continue."

"This is where the text becomes more confusing." Morron highlighted a group of symbols, floating in the holosphere above the table, and translated, "Of the pair of entangled crystals, the crystal touching a living body first will form a reversible connection via crystallization along... Kastumi, do you know these glyphs?"

Nakawa frowned, and briefly consulted her notes. "M~aricq~tuoah," she said. "Electric lines... if that makes sense?"

"Nerves." QBall looked up. "The nervous system," he specified. "Actually, that fits to a T what we know from the scans of a psychocrystallization victim. AL-JAZ¹²," he called his AI, "display the data, please."

The floating Xeryon glyphs was replaced by Eliza Fox's medical file. QBall swiftly marked and enlarged a 3D model, zooming in on her chest and torso. "As you can see the psychocrystal connected itself with the spinal marrow and through it with the brain via hyphen-like crystal threads tracing and partially replacing neural pathways—"

"Niko." Ayse bent towards her and nodded at the door. "You've got a visitor."

Zachary. Waiting with a drawn expression that—

With dread, Niko excused herself from the table.

Something was wrong. Very, very wrong.

"The Queen sent a Mega-Star Destroyer, packed to the brim with explosives and rocks through hyperspace on a collision course with Earth," Zach told her in a low voice after they'd moved out of earshot of the guards posted at the door to the translator room. "Admiral Subadar rammed it with the Kiowa, triggering the explosion in exosphere rather than atmosphere. I thought you shouldn't get that by news feed."

"The Kiowa?" Niko mouthed, feeling cold. "Survivors?"

⁹ C-type asteroids are dark, carbonaceous objects. 75 % of the known asteroids are C-types.

¹⁰ Average distance of 64 Angelina to Earth: 2.684 AU (light takes 22.32 minutes to travel that distance).

¹¹ When I wrote the first draft of this story in the y2k, quantum entangled crystals were still considered fiction, but in 2011 Lee et al. reported the successful entanglement of two spatially separated diamonds (crystalline carbon!) at room temperature (Lee et al., Science 2011, doi: 10.1126/science/1211914). A summary for lay persons can be found at <http://www.scientificamerican.com/article.cfm?id=room-temperature-entanglement>

¹² Al-Jazari (1136 – 1206) wrote "The Book of Knowledge of Ingenious Mechanical Devices" in 1206, a popular D-I-Y book detailing water-powered automata, pumps, and clocks, predating Leonardo da Vinci by more than 250 years.

"Unknown. The ship's totaled." Zach answered quietly. "They're collecting the rescue capsules as we speak. We don't know about G—"

"Goose is okay," Niko told him firmly. "He was nowhere near the ship. I'd know otherwise—" At his sad expression, she shook her head and emphasized, "no, Zach. I'd know."

"At such a distance?" he asked warily.

"At any distance."

His frown deepened at the conviction in her voice. "Any progress?" he asked with an uneasy look back at the guarded door.

"A little. The archive contains a lot more technological specifications than we expected. Once we identified the critical features, we will prepare a broadcast that should enable our tech-savvy allies to keep the Queen on her toes." Niko look up and down the corridor before adding, "QBall even hopes to put some of it to use right here."

"Just hurry." For once, Zach's weariness and tension showed on his face. "Keep it to yourself, but it doesn't look good. We stopped this attack, but the Queen took out a third of our firepower in it. And we didn't have equal numbers to begin with."

2088-09-23

Office of Cmdr. Walsh

"...made it impossible for the dream travelers to control the second crystal generating their holographic entity or to return their perception to their body on their own volition. If their condition wasn't detected in time, the information loaded into their brain would exceed their brain capacity resulting in a fatal stroke."

Niko shifted her weight when QBall took a deep breath. Was it really only three days ago when she'd stood in this very spot, informing the commander and then her team what the crystal archive likely contained? Three days. And now Goose was missing, a carrier had exploded in orbit, and the commander looked as if he hadn't slept – or changed his uniform – since she'd been here the last time. Niko suppressed a shiver, forcing herself to listen to QBall summarizing the translation team's results.

"The crystal traps the dream traveler when there's a small amount of excess energy during the formation, causing additional excited quantum states that bypass the user control and keep the crystal connection alive even when the user tries to log off." QBall swallowed. "We believe that the Queen uses excessive energy in the process for creating her slaverlords."

"How are the slaverlords controlled then?" Walsh's voice sounded rough.

"The Xeryon implemented features to monitor and manipulate the dream travelers' experience," Niko added. "Officially, to detect trapped travelers in time and to prevent traumatic experiences." She drew a face. "Sure backfired, sir."

"Yes, but with zero strategical value for getting the Queen off our backs!" Walsh snarled. "Do you have anything *useful*?"

"They also constructed a disentangler for freeing trapped travelers, sir," Niko said. "Usable on both, the slaverlord or the cryptee, without having to connect the original crystals."

"What about the self in the slaverlord crystal?" Walsh inquired.

"We are talking about a pair of quantum entangled crystals, commander," QBall reminded him. "The content of these two crystals may be spatially separated, but quantum mechanically it's just one."

"Can you build such a release device or do you run into the same problem you had with duplicating the archive and the reader?"

“We can build it,” QBall stated with emphasis. “That’s the beauty of it. The disentangler merely measures all quantum states in the accessible crystal, thus collapsing the wave functions of both crystals into defined states and thus decoheres the entanglement of the crystal pair, eliminating the slaverlord and freeing the victim.” QBall beamed. “No exotic quantum states to worry about!”

“How long?”

“Forty-eight hours,” QBall said, “barring unpleasant surprises with the equipment. Replication on the sub-atomic scale isn’t a fast process.”

“Also, prepare transmitting the blueprints and a digicopy of the device to be send along,” Walsh ordered grimly. “We have to convince the Queen once and for all that eliminating Earth won’t achieve her goal of containing this information. We won’t win against the armada by decohering one slaverlord at a time. Dismissed.”

Inner Solar System Interceptor-7

Goose cursed and rolled into a sharp turn. The Crown Destroyer’s aft battery harked the shields of his interceptor, the resulting glare blinding him and his sensors alike. The stronger shields of the Crown ship didn’t so much as flicker from his fire.

He avoided crashing into the dragged asteroid by a hair’s width, calculating its relative position from memory and instinct. Not a second too early, given that he saw the ragged stone surface rush past his right wing by the time the shield glare subsided to a level that allowed reliable sensor data and direct visuals again.

=A close shave, Goose.= ALMA’s only comment. =Shields reduced to 48 per cent. Avoid further hits or your ass is toast.=

“Did you get the data on how close they draw their shields around the drag beams?”

=Data imprecise, but less than two meters.=

Too narrow. He might make it through the Destroyer’s fire and hit the emitters, but nobody with normal reflexes would, and a dozen drag beams were pulling the unnamed NEO¹³. And the closer they got towards the point after which they’d have to drag the stone actively back to avoid impact, the more Crown fighters protected the main ship. A low ping arose, speeding up by the minute. The alert of the no-return-point approaching. Frustrated, he hit his flat hand against the dashboard.

=Hitting me won’t solve your problem,= ALMA, fucking smart-alecky AI that she was, reminded him. As if his ‘problem’ wasn’t just a fucking asteroid being dragged to Earth by a Crown Destroyer with shields protecting its drag beam emitters that were way too good for their small pack of interceptors to penetrate. He stopped. The Destroyer had shields, the asteroid...

Circling back, he activated radio. “We’re hitting the wrong end of the tether. Target the contact points of the drags on the surface. Let’s unhitch a few million tons from their pull!”

His blasters carved a deep groove into the space rock. He immediately turned, fired again, cutting deeper, angling to get under the area where the drag beams made contact. Dust shot up, spiraled along the drag beams. An ice deposit under the surface evaporated—

Goose floored the pedal, but the acceleration wasn’t enough. The NEO was bursting, expelling rocks the size of ships. The obnoxiously nervous collision alert blared, for once being right as ALMA also screamed a warning. The impact on his left wing threw him into the safety harness as it turned the interceptor into a wild spin, trailing a stream of scrap metal and engine fuel.

¹³ NEO. Near Earth Object.

BetaMountain
Communications Center

"No, Tripwire!" Doc told the bright-red cogwheel rotating beside the prepared message text scrolling over the screen. "We do *not* encrypt this transmission!" Anger had crept into his voice. He'd repeated his order often enough now that he considered sitting down and hard-coding it into his programs. Security consciousness was one thing but—

"Keep calm," Niko reminded him, "or do you want our next mission report to go clear-text to the Queen, too?"

=So this isn't a permanent insanity of his?= the program sparkle bleeped in.

"No, Tripwire," Niko told it, "this is us spreading the information the Queen wants to keep secret at all costs as far and as wide as possible."

=And why didn't you tell us that?= the program huffed at Doc before disappearing back into the console.

"Since when do you know my programs better than I do?" Doc asked exasperated.

"Since you tried to talk my AI into baring its personality files to you?" Niko returned sweetly.

Remembering the AI's reply, Doc grumbled, "if that was your AI I'm eating Goose's boots."

"With ketchup or mayo?" Niko dead-panned.

"As if KASSIE would ever—"

"Is the transmission prepared?" Zach entering the com center interrupted their banter.

"Yes, mon capitaine." Doc slapped his hand over his heart. "We're just waiting for QBall's digi-copy." He blinked innocently. "And the digicopy of the disentangler, of course."

"Doc, this is hardly the time to—" Zach stopped when Niko grabbed the edge of the console for support, reeling. "Niko, are you all right?"

She pressed a hand to her temple. "Goose," she whispered. "Something happened to Goose."

Inner Solar System
Interceptor-7

A bout of static spilled from the speakers, but the tiny screen in the smoke-filled cockpit didn't so much as flicker. A voice became understandable. =—redo. I repeat. This is LSS Laredo for Wildcard. We register severe engine damage on your vessel. You're cleared for starboard bay 5. Can you follow the beacons?=
=

"Negative, Laredo," Goose answered immediately. "You risk critical infrastructure when admitting me. I'm preparing for planetfall. Wildcard end."

=Negative, Wildcard!= the operator ordered. =Your ship doesn't stand for planetfall. We're bringing you in on starboard 5. Follow—=
=

Goose cut the comm. "No, you won't," he muttered, checking his controls. "ALMA, are we still on track for BETA?"

=Positive, Goose.= The AI's calm voice was a relieve. =LAREDO is trying to log into our flight controls. Shall I continue to block them?=
=

"Yeah," he said grimly. "We'd be coming in hot as hell and they need that runway for the normals requiring their beauty sleep."

2088-09-24

BetaMountain
Office of Cmdr. Walsh

“They had to fish me out of the ocean!” Admiral Frederic Subadar raged. “The jacklegs didn’t catch my capsule before re-entry!” He stuffed his hands into the pockets of the orange-and-yellow rescue coverall, he hadn’t changed into a uniform yet. “I could have been half across the galaxy in the time it took them to get me to shore! And they call themselves *Navy!* Idiots!”

“The Pacific isn’t exactly a puddle,” Joseph replied dryly, “and the Board expects you to make your trips with your own ship.”

Frederic snorted. “So, where are we in that mess?”

“Up to the insignia and then some. So far, the interceptors managed to unhinge any stone the armada drags toward Earth, but we have considerable losses in the ranks.”

“How long?”

“The scientists say another day. If we have that—” Walsh shrugged. “Blake and Antonova have a hard time covering Earth with two ships.”

Frederic studied the tactical display in the holotank on Walsh’s desk. “Innovative use of the tugs at BETA Space Station,” he commented after a moment. “Can’t be as maneuverable as a carrier, but—” He whistled.

“Antonova’s idea. Not a heavyweight, but it reduces the gap. Without that—”

=Sir?= Sheela interrupted them via the intercom. =Interceptor-7 is reported on course for BETA with severe engine damage. ETA on ER 1 in eight minutes.=

“Any direct contact?”

=No, sir.=

Walsh cursed. “I’ll be there. Admiral Subadar will cover for me in the meantime.”

“Interceptor-7? Is that still the pilot you sent me?” Subadar asked, after Walsh closed the line. “Wildcard?”

“Yes,” Walsh answered grimly, already heading out. “I’ll be back ASAP.”

“You shouldn’t give him special treatment like this,” Frederic warned. “Special snowflakes get burned. You know that.”

Joseph sighed. “How do you treat a special snowflake that is special?” he asked, looking back from the door.

Frederic’s attention was already back on the tactics. “Depends on how special ‘special’ is.”

“How much do you know about supertroopers, Freddy?”

Subadar froze.

BetaMountain
Emergency Runway 1

Sirens howled. The burning interceptor screeched into the protective gel foam, careening, and – engines still red-hot – came to a standstill in the middle of the emergency runway. Fire extinguishing foam, cooling gel, and shock absorbent in case of a belated explosion was sprayed onto it. Environmental parameters were constantly monitored, reported to the controllers, and adjusted—

Goose opened the cockpit seal the moment he got green and leaped down to the slippery concrete. A glance at the interceptor’s engines told him it had been nothing short of a miracle that he’d reached Earth – burning –, made planetfall – burning –, and landed – burning – on the ER in one piece. Without exploding. *Cool*. Although the gel foam coating everything around him and his boots up to his knees smelled like pissed-on plankton.

"You look a disgrace," Walsh said behind him.

A correct assessment, Goose gave him that. He hadn't exactly taken time off to shower, shave, change clothes, and take a nap since the armada was clogging the neighborhood. "Nothing that ten minutes in a sani-cell won't fix, sir." He turned, saluted snappily, and kept his surprise about the commander's own worn appearance from his face.

"Then by all means, do so," Walsh snapped, "before you get contained as a biohazard."

"Sir, I was hoping to be off in—"

"You will leave this base once O'Malley's team has this ship—" Walsh cut him off, indicating the almost burned wreck of the interceptor in Goose's back, "—fit for space again."

Goose shifted uncomfortably at that, but if he—

"Nobody but O'Malley's team."

Fuck. Not for the first time, Goose wondered if the man had undisclosed mind-reading abilities.

"Clean up. Get some food, and the sleep you eschewed up there. *You are grounded.*" Walsh turned, not waiting for his reply or salute.

Goose sighed and fought a yawn. *Damn.*

Digital Copier Station

"Another fourteen hours, at least!" QBall snapped, annoyed, at the com screen showing not one but two commanding officers demanding he be done *by now*. "We're printing molecular layers! Do you know how many there are in a specimen of the required size!?"

Niko checking and double-checking the translation of the instruction files for accuracy and possible double-meanings was glad that her tightened shields prevented her from picking up that ire at all. She lowered her head, focusing on the double display showing the Xeryon hieroglyphs on the left and their translation on the right side. She was worried. She wanted to lower her shields, reach out, verify that Goose—

But she also remembered Zach's warning glance when the first shock had reached her in the communications center, his frown when she'd admitted earlier just how aware she was of Goose's presence. It made her wonder how much Zach knew about telepaths.

QBall's com screen went dark and he immediately called up the interface of the molecular printer, checking the progress on the disentangler. Niko's wristcom vibrated. A glance at the display revealed a plain text message, two words, from the commander who'd just been on the screen.

"Cafeteria. Now."

Personnel Lounge a.k.a. The Cafeteria

"Thanks for coming over." Susan, the waitress on duty, rushed over the moment Niko set foot into the cafeteria. "We're close to shift change and really need that table." Niko's lack of comprehension must have shown on her face, because Susan explained, unasked, "I know better than to wake a soldier by shaking him, but calling didn't help and he isn't the most popular of our regulars." She sighed. "Especially now that he blocks a table at lunch time. I—"

"Susan," Niko interrupted her, short-tempered from lack of psionic input. "Just who are you talking about? I got a cryptic message telling me to come here and that's it. I have no clue."

"There." Susan simply pointed at one of the large corner tables. Normally fit for seating ten guests, it currently held only two empty trays and a man in the white-and-grey of an unmarked pilot's combat suit, sleeping with his back to them, head pillowed on his crossed arms—

Shane.

She'd kept her shields that tight and he'd been right here—Susan forgotten, Niko circled the table to approach him within his field of view. "Goose?" No response. Since when was he so careless as to sleep in a public, unsecured place? "Goose," she repeated. "Are you all right?" Again, no response.

Warring briefly with herself if this was acceptable or not, Niko tapped her badge and strengthened her next call telepathically. Undeserved relief flowed through her at the mental contact. "...Goose..." That got her a murmur that sounded suspiciously like 'five more minutes'. "...*No more minutes. This is the cafeteria, Goose...*"

"And?" He raised his head from his arms. "Did the muffins come alive and stage a revolt?"

Laughter bubbled at that. "No, but Susan needs the table for the guests."

"And what am I? Chopped liver?"

"Done eating," Niko corrected with a nod at the empty trays.

"H-hm." Goose rested his head on his crossed arms again, looking for all it took as if he planned to go back to sleep. Niko didn't remember having seen him that tired before. "Shane," she asked quietly, "when was the last time you slept?"

"Not sure," he mumbled into his sleeve. "When you and Walsh woke me..."

She and Walsh?! Niko froze. "That was more than four days ago!"

"Eight shifts, a planetfall, and a trip to Deltoid," he corrected sleepily. "What's wrong? Walsh said four-to-one shifts, and Subadar's pilots did double, makes eight." He shrugged, yawned, and grumbled, "Should have crashed the damn thing in the desert. Would have spared me the glibber and being grounded until O'Malley has time to fix the burned carcass." Niko giggled, and he shot her a dark look over his sleeve. "Not funny. Do you know how the stuff *smells*?"

"Can't be worse than your pants after a four-days shift," she shot back, and blushed when realizing the implications. "Uhm, I mean—"

"Yeah, that's the reason for short shifts." He yawned.

"I think there's another one, Shane," she commented dryly. "How about you go sleeping in your bed instead of on a cafeteria table?"

"I'm a supertrooper," he mumbled, "don't you know that we're the most frugal?"

"If you're awake enough for that word, you're awake enough to seek your own bed," Niko declared, finally patting his arm. "Now move. They need the table to feed people."

"The poor sods." Goose yawned and came to his feet, searched his pockets, and left a hefty tip on his empty dish. At Niko's surprise, he grinned. "Their tables are a lot comfier than they look."

Niko left together with him. "How's it really looking up there?" she asked once they'd cleared the busy cafeteria vicinity.

Goose's expression became instantly guarded. "Very bad," he said finally, without looking at her. "Subadar going kamikaze on her thwarted the Queen's initial plan, but now they turned to the obvious solution: dragging small and medium sized NEOs to Earth."

They stopped in front of the lift doors and waited for a cabin to arrive.

"So far, we caught them, but the Queen has more fighters than we and large ships for hauling meteoroids and even small asteroids at speed sufficient for causing a global event if one slips through." A muscle in his cheek worked as he kept staring at the closed lift. "Sooner or later one of them will escape us. And one's enough."

Goose looked down at his boots, when the lift pinged, and added quietly, "You don't have to come along. I promise I'll go to bed now." He gave her twisted smile. "With a detour to refill Poss's food dispenser, or my cat will eat me while I'm out cold."

"Shane..." Her trembling voice stopped him.

"*Get some rest. See your family. I expect you back in ten hours.*" The commander's gruff order, given after receiving QBall's annoyed reply on the com, was still playing back in Zach's mind when he headed to the lounge to get some take out. He didn't want to spend the few hours he had with his children on his mediocre attempts at cooking.

Crossing the corner, he was surprised to spot Goose and Niko waiting for a lift cabin. The ST had flown non-stop against the armada and Zach had caught enough of the emergency codes accompanying his return to know that nobody else would have walked away from that landing. They stood close with merely a hand's width between them, talking quietly. He noticed that Goose avoided looking at her, the tension in his tall frame even visible from this distance. Zach frowned. Was Niko again—

Just when he was about to hail them, a lift cabin arrived. Niko raised her hand uncertainly, not making contact until Gooseman leaned into her touch, allowing tension and wariness to seep away for a stolen moment while her hand touched his cheek, before he visibly straightened and entered the lift. Without her. Niko's still raised hand closed slowly, as if holding on to the fleeting contact while the doors shut between them.

Zach drew a quiet breath, ashamed about his suspicions. He felt like having intruded on a very private moment – at least as private as possible between two members of the same unit and Gooseman's restraints. It made him wonder if he would have had the strength to walk away. He remembered how isolation felt, especially isolation by court – or Board – order, and realized, the answer was 'no'. His children were proof of that.

2088-09-25

MPQ 206

Breakfast was a somber affair in the Fox household today. The news feed running on the kitchen monitor showed long distance images of the hovering Crown armada and, repeatedly, the brilliant flash of the Kiowa exploding only a few thousand kilometers outside atmosphere, taking one of the armada's heavyweights and a quarter of its crew with it.

Various news anchors gave their best to give everything a positive spin, but the facts looked grim and were within reach of hobby astronomers' telescopes, so no chance for outright lies. One of the spin doctors even claimed the danger to be negligible because no senator had bothered to go off-planet this time, as if any planet would accept them with the armada hot on their heels. Zach believed that one to be out of a job once somebody from the Board reviewed the news feeds. He allowed himself a dark chuckle into his coffee.

"Mrs. Bogdanovich scheduled a class test for today," Jessie mumbled around a large spoonful of cereals soaked in soy milk and cocoa. "And the electronics fair is next week." She snuffled. "If those rusty tin cans don't go home soon, it'll get all cramped into the same week."

"Hey, look on the bright side, little sister!" Zach Jr. nudged her elbow and winked. "Once Dad's back at work they're done for." But the look he gave his father behind her back told Zach that his son knew exactly how grim things looked and tried to shield his sister. "And until then it's free Tri-D—"

"—until your schools transmitted your homework," Zach stated dryly, helping himself to another toast.

"Daaad!" Zachy protested. "We don't have to ask for—"

The doorbell chimed and Zach put his napkin down beside his dish and went to answer the door. He stopped dead-still at the sight of their visitor. "Sir? To what do I owe this—" He interrupted himself, inquiring, "did something happen?"

"May I come in first?" Walsh asked. "This is a public hallway."

"Yes, of course." Zach stepped aside, letting him in. "The living room's over there, sir." A sharp turn brought him back towards the kitchen. "Junior, take Jessie and your breakfasts and wait in your room."

"Dad?"

"No discussion, son." He nodded in the direction of their bed rooms. "Please." A moment later, Zach sat on his couch in front of the commander, who'd claimed the armchair, awkwardly stretching

out his injured leg. “They’re out of earshot, sir,” Zach said after the click of Zachy’s door registered in his sound enhancers. “May I ask now what this is all about? This is hardly a social call given the current situation.”

“Indeed not.” Walsh sighed. “We need your permission to use the disentangler on your wife.”

“What?” Zach shrank back. “Why—?”

“You know how it looked up there when I sent you home,” Walsh told him. “Believe me, things haven’t improved in your absence. We have to prove once and for all that the disentangler works, or we’re done for.”

“Then give me a ship and I get you a dozen slaverlords within the hour,” Zach bit off.

“We still wouldn’t know what the disentanglement does to the cryptee,” Walsh reminded him. “Frankly, aside from Andor and maybe Kirwin, few of our allies have the technological means to build a disentangler. They may disseminate the information, but they can’t put it to use.” Walsh shook his head, dismissing them. “Can you see the Andorians or the Kiwis using a disentangler when there’s doubt about what happens to the cryptee?”

“No.” Zach felt bile on his tongue. “But I can see the Board forcing a disentanglement.” Almost as an afterthought, he added, “sir.”

Walsh sighed. “Exactly.”

“So, if I deny your request—?”

“It will become a Board order within the hour,” the commander confirmed. “I’d prefer if it didn’t.”

Zach’s throat constricted at the thought. “I want the best possible treatment for her,” he forced himself to say. “Before, during, and afterwards.”

“On one condition.”

Later

The lid of the CHU was completely frost-free. The temperature inside, listed together with other vital parameters, equaled the body temperature of a normal human being. Robotic arms in pristine white and chrome grabbed the lid. A sharp hiss marked the moment the sterile atmosphere inside merged with that of the intensive care operation room. The lid moved steadily upwards, revealing the motionless body of the woman inside.

She wore a white tunic. IVs and other wires were retracted automatically. Light scattered off the facets of the purple hexagonal crystal in the center of her chest as self-stimulated respiration set in. A third robotic arm descended, placing a dark blue crystal on top of the purple one.

Light erupted between the two crystals, too bright for the cameras. The vital signs continued scrolling over the whitened screen. Temperature, heartbeat, oxygen concentration, awareness... More general indicators beside the scientific values began turning from yellow – at risk – to green. All fine. The white light subsided. The microphones caught a voice hoarse from disuse. “Zachary?”

In BETA’s main control room, Zach formed a tight fist behind his back. He knew how much the vital signs, the voice at the end had been tweaked. *Faked*. He tried not to think about the unencrypted broadcast showing his wife to an unsympathetic galaxy, to his nemesis; a nemesis a lot more personal than the brass knew...¹⁴

The Queen’s equally unencrypted answering broadcast filled the main screen, warning all recipients to face her wrath in case they perpetuate the falsehoods, like Earth faced it for its lies.

Outside the two-way screen’s focus, Niko was waiting with Goose and Doc. The tiny screen of the hacker’s CDU glowed, displaying a hologram Zach had taken just before his family’s fatal deployment to Kirwin.

¹⁴ See “Psychocrypt” (TV episode) and “The Lie” (fan fiction by A. Kniggendorf)

"Sir," the communications operator addressed the commander, "the flagship of the armada is hailing us on an open channel."

Niko straightened her shoulders at the announcement. Walsh threw Zach a brief glance, then nodded grimly at the operator. Showtime. "Make it a multi-broadcast. *We have nothing to hide.*"

We have everything to hide, Zach corrected, keeping that desperate thought off his face. *We're playing this farce for the whole galaxy to watch.*

The content of the main screen changed to the Queen of the Crown staring down at them. =Admit your sham, and you may beg for your lives!=

"I beg your pardon," Walsh replied dryly, "but facts only shame frauds."

The Queen ignored him. =And Zachary. Really, you ought to know better. You aren't so entertaining as that I'd put up with this.=

Zach's nails dug through his glove into the synthoskin of his artificial hand. "Her return was always my goal," he stated firmly. "I never claimed otherwise."

=Yet you never write, you never call...=

"That might be because he's married, my Queen," a quiet, no longer hoarse voice said. Eliza entered the focus of the two-way screen, breathing a kiss on Zach's cheek before glaring at the Queen, "and I don't share!"

=Pah! The Queen made a dismissive gesture. =Another piece of trickery, easily disproved! She took a silver chain from her neck, holding it into focus. =This is the Eliza Fox crystal! And this— She touched opposing facets. =—is its slaver!—=

Purple dust erupted in her hand, flowed over her fingers and rained onto her robe and to the floor. The Queen stared at her empty hand. The screen went abruptly dark.

"Crown transmission end," the comm operator stated unnecessarily. "We're still broadcasting for our allies." On the main screen, the tactical display again showed a schematic of the solar system filled with a swarm of angry red dots and far too few blue sparks centered around the third planet. A small screen inset still showed Eliza leaning against Zach's arm. He threw her a worried glance, feeling the tremor in her slender frame. *It's been almost an hour, since—*

"Sir, Andor and Kirwin confirm reception of the initial broadcast," the operator reported, "included digicopy is being processed."

"Did the Queen catch that?" Walsh inquired.

"Both messages were in the clear with significant signal strength, sir."

On the screen, a red dot flashed and disappeared, then another one, and another, and—

"Sir, large ships are entering hyperspace in high numbers. Vector..." the operator checked his display. "*Tortuna, sir. The armada retreats!*"

Cheers erupted all over the hall. In the sudden noise, Goose tensed and frantically signaled to cut the broadcast. Zach fervently wished for the same. He had to get back and make sure she wasn't alone when—

"End transmission," Walsh ordered and frowned. "What's—?"

"Permission to leave," Zach requested immediately. His attention on the commander, he almost missed Niko fainting beside him.

Goose caught her, deftly keeping Zach from touching her. "Go," he told him with a firm nod towards the exit. "I have her. Make sure we didn't tell too big a lie to our allies."

to be continued in
Crystal Structures 5
