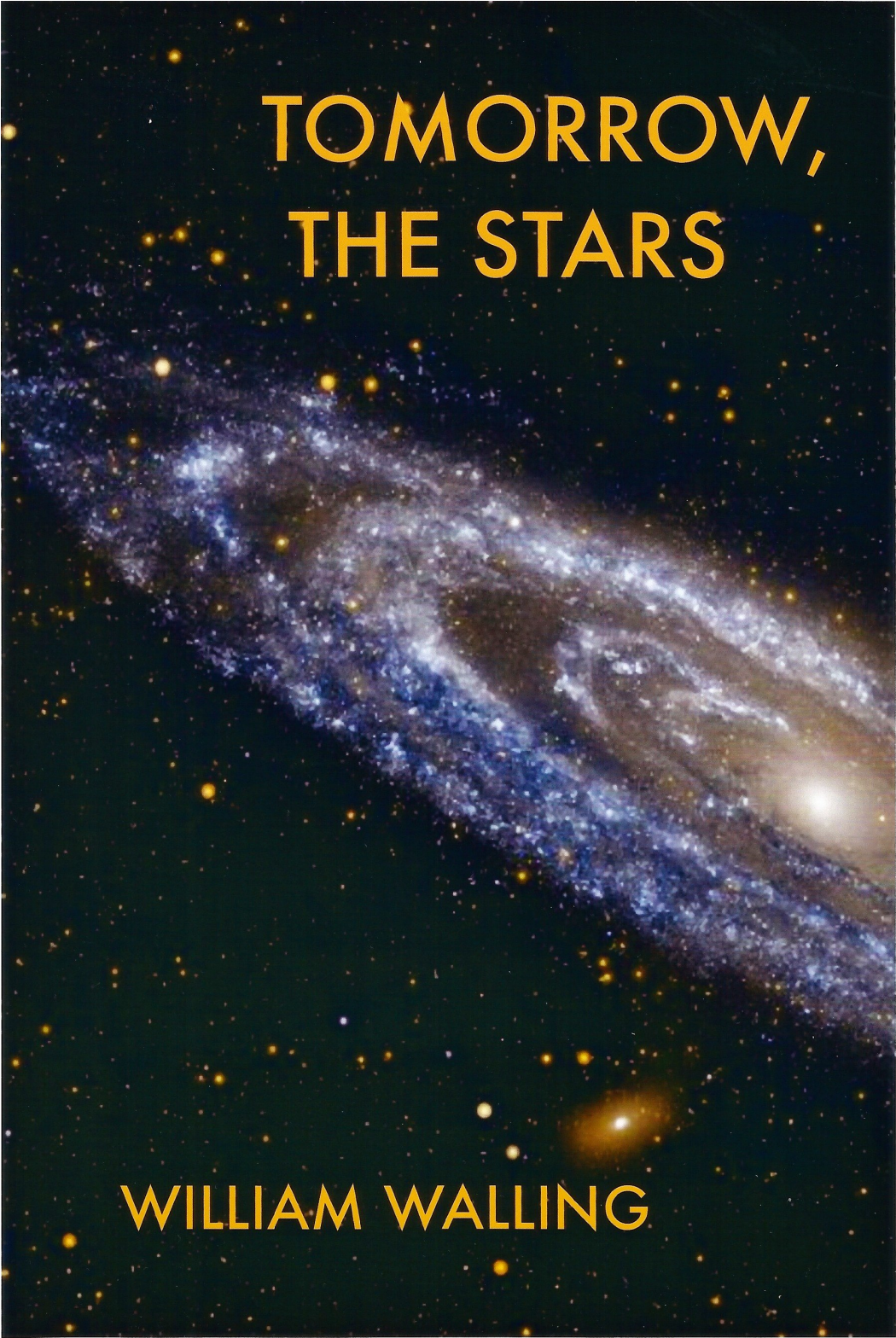




TOMORROW, THE STARS

WILLIAM WALLING

Tomorrow, the Stars

William Walling

“In night and wretchedness, per
aspera ad astra, God grant it!”

Richard Wagner, upon completing
Der Fliegende Holländer, 1841

One - Mister Smith

“Bunking here tonight?” His quip typically droll, Dr. Jefferson Belal Das cracked the hermetic hatch of my cubbyhole office. “Last call, Roger, unless you’ve a lonely weekend in mind.”

“Uh, oh!” I glanced at the bulkhead digital chronometer. If not for Jeff’s warning, I would have missed the late bus. “Thanks, Raja. Wait up, will you?”

A stellar physics specialist, Das occasionally uses headwrap to please his mother, a Bangladeshi Muslim who reveres the *Sunnah Mu’akkadah* tradition, which he admits is a matter of indifference to his Hindu father, a high mucky-muck government lawyer. I happen to know that even on a visit to New Delhi his “raghead pose” is a concession to early baldness, and has nothing to do with preserving familial harmony. Between timeshare stints in orbiting Galileo Observatory, or lecturing to one batch of Princeton grad students or another, Jeff’s passion is restoring antique autos. He has five in storage at last count, including a candy apple red Ford hybrid that looks as if it’s been freshly driven out of some extinct auto agency showroom.

I clipped some loose notes in the hold-down fixture on my desk, and caught up with Das floating topsy-turvy in the passageway. We pulled ourselves in tandem along tightly strung freefall safety lines “up” two levels to Galileo’s main zenith airlock, zipped through chamber open on both sides. Tugging our way through the umbilical tube’s claustrophobic tunnel in tandem, we caught the regular steward in the act of prepping for departure.

“Hold it!” I called, earning a surly look due to our tardiness.

“Ahoy the weather deck!” hailed Das, sounding like the Ancient Mariner with a bad head cold. “Stand by t’weigh anchor ‘n unreef your mizzen sheets.”

The steward pulled a face. He commanded auto-retraction of the umbilical tube, and began to cycle the airlock hatches closed.

There were plenty of empty seats; many staffers had fled Galileo on the “early bird” shuttle, which runs only on Fridays. I leveraged myself into the facing seat opposite Director Mattingly —yes, *the* Sir John Mattingly, O.B.E., F.R.A.S., with an rasher of alphabet soup tacked on at the end. A celebrity in the eyes of all fellow astronomers, Mattingly’s youthful brilliance had earned him a Hawking Fellowship at Cambridge. Much later he had been awarded a knighthood by His Royal Highness Charles VII shortly after publication of his incisive analyses of data received from the Centaurus Probe.

Dr. Mattingly looked up from the *London Times* elex edition in his seat’s armrest viewer. “Ah, Shore, there you are. Hullo, Jefferson. Thought perhaps we’d left you two behind.”

Jeff latched the safety harness in the seat next to mine. “TGIF, Sir John. Working late?”

“Yes, confound it! Too few hours in any given day.” Crow’s feet crinkled pleasantly around Mattingly’s light blue eyes, enhancing his authentic British charm — something I’ve learned is impossible to counterfeit. Our director’s curmudgeonly reputation is largely undeserved; there’s a lot more to him than the tweedy, muddling-through “Colonel Blimp” facade he presents when confronted by media newshounds or boorish interviewers.

Das plugged a coin-sized disc into his armrest viewer, and was soon lost in an elex edition of a day-old Delhi newspaper.

Dr. Mattingly didn’t return his attention to the newspaper. Eyeing me analytically, he went through the throat-clearing preamble I was accustomed to hearing before saying, “Rather hoped I’d bump into you on the ride home, Shore. If you and . . . a friend have nothing better in mind this evening perhaps you’d like to attend the theater with Margaret and me? Chap I once knew rather well is playing Holofernes in a live transmission of *Love’s Labour’s Lost* from the New Globe down in London. He was kind enough to send along four complimentary tickets.”

“That’s . . . gracious of you, Sir John, but I, uh . . .”

“Come, come, Shore! At least *some* of you Americans have to be Shakespeare buffs.”

“I, well . . . It’s Friday,” I said lamely. “Not sure I can round up a date at this late hour.”

The director’s lip curled. “Cosmologists!” he said with a twinkle. “Every ruddy one of you shares the identical outlook: not interested in one iota of anything closer than a few million parsecs.” He turned to Das. “How about you, Jefferson? Care to see the play?”

The query roused Jeff from his newspaper. He begged off, doing his best to sound ingenuous, then dodged the issue in typical fashion by changing the subject. “You’re acquainted with a stage actor, Sir John?”

“Yes, I daresay. Or was once in the long ago and far away. Geoff and I were both raised in Stratford Commune. Grew up together, actually, as fellow Warks. He was a neighbor I’ve neither seen nor heard from since we tramped the Cotswolds together as boys. Surprised me no end popping up from nowhere so to speak, sending a note and four invitations to the holothheater.”

I perked up. “Stratford Commune? Shakespeare’s village . . .?”

“Capital, Shore!” There was no hint of condescension in the director’s chuckle, only an example of his sublimated, chiding sense of humor that surfaces on occasion. “Stratford may be an excellent locale in which to steep oneself in Shakespearean lore, but it is no longer a ‘village’ in any sense. Margaret and I revisited Warwickshire three summers ago during my sabbatical. Few locals underfoot, but gaggles of tourists. Dreadful! Couldn’t wait to be shut of the place. Anyhow, do think it over, Shore.”

“Oh, I will,” I promised.”

Conversation lagged. Mattingly became engrossed again in his newspaper. A while later, as the bus maneuvered to co-orbit and rendezvous with Earth-Luna Station he gave it a last try, bearing down on the invitation to accompany him and his wife to the holothheater.

Feeling cornered, I hedged, hemmed and hawed, waffled, backed and filled and ended up wilting under his penetrating blue-eyed stare, and assured him I would do my best to round up a date the minute we docked at Earth-Luna. About then the thrusters rumbled to life, not loud enough to drown out speech, just making back-and-forth conversation not worth the effort.

Our “bus” is a relic, a second- or third-generation Aerospaceplane upper-stage orbiter of yesteryear. Due to wear, tear and obsolescence spacecraft operator *GrossEuropa Raumschiff, GmbH*, had judged the clunker no longer worth the rework expense and stringent qualification testing necessary to meet atmospheric re-entry safety standards, and taken it out of service. After knocking around on-orbit for quite a spell, the dorsal clamshell doors had been welded shut, the spacious cargo bay vacuum-proofed. Surplus lightweight airliner seats of mid-twenty-first century vintage, had somehow found their way out to Earth-Luna Station, and were installed in the barnlike interior. No one would dream of returning the rattletrap to the ground, but for the daily orbit-change commute to and from Galileo it served the purpose nicely.

Sir John dozed, a diurnal habit. The Raja finished his newspaper, ejected the disc and replaced it with what looked like a day-old elex *Daily Telegraph* bulldog edition.

The instant ambient Pascals readouts matched between the docked bus and E-L, the hatch opened. With my Eustachian tubes popping as the pressures equalized, I led the other staffers through the airlock soon as it cycled open, tugged through the umbilical tube using the freefall safety line, and emerged in the complex’s nadir berthing stack. Dodging into the nearest convenience booth, I punched buttons, calling Clarice, a *GrossEuropa Raumschiff* stewardette I had dated on occasion.

Disappointed to see the image of Clarice’s scratchy-voiced roommate jell in the vidicom display, my hasty request to speak to Clarice earn a funny look. “Rog, you’re getting forgetful in your old age. She’s working aboard *Asgard*, outbound to the trans-Jovian satellites.”

I confessed to an often faulty memory despite enjoying relative youth and vitality.

Clarice’s aggressive young roomie spent a minute hinting none too subtly that she herself just might maybe be available if I could sweet-talk her into it. I managed to pass on the offer less than graciously. Three more calls netted zilch; as I had explained to Sir John, it was Friday evening, and weekends are hopeless unless matters are arranged in advance. Every gal I knew was either busy, or the computer voice on her answering service invited me to leave a message.

Using Radial Lift Three, I rode home to my two-room bachelor’s quarters, showered quickly, got into a freshly-pressed dark jumpsuit, and grabbed a cultured turkey and Swiss sandwich, plus a squeezetube of beer, in the Earthview Room’s crowded snack bar.

Promptly at twenty minutes to eight, I met Sir John and Dame Mattingly outside the holothheater. A Dame Commander of the British Empire in her own right, Margaret Duvalle, as she’d been known professionally, had been rewarded for her outstanding career in the performing arts, principally her work on the holographic stage. As we approached the marquee, Sir John clucked in mock sympathy at my dearth of popularity. He gave away the fourth ticket to a sad-faced lady at the end of the box office queue.

From curtain rise at the New Globe to the third curtain call by the cast principals, *Love’s Labour’s Lost* impressed me as witty and colorful, a thoroughly well-produced comedy, although the archaic language made it damned difficult to follow. Sir John’s boyhood pal did exceptionally well as Schoolmaster Holofernes. Between acts, Dame Margaret told me how the King’s Men had formed under Charles VII’s sponsorship to recreate the tradition and atmosphere of the Elizabethan-Jacobean Stage. E-L’s main holothheater, just off the midway at the base of Radial Five, is larger than the one in spoke three; for whatever reason the holographic stage reproduced there fluoresces less obviously when actors emote vigorously, move or gesture abruptly.

Can't say Shakespeare's exactly my cup of tea, but even a neophyte couldn't help but endorse the production. It was diverting, entertaining, thoroughly enjoyable.

Applause accompanying the final curtain call continued sporadically after the virtual actors had taken their virtual bows the final time. Raising his voice above the ragged, slowly tailing off applause Sir John told us he meant to send a congratulatory e-letter to his former chum, the actor who had played Holofernes. By unspoken mutual consent, the three hung back on the fringe of the crush, waiting for the theater to empty out. I was chatting with Lady Margaret about nothing in particular when I heard Dr. Mattingly grunt loudly.

I turned, and found him confronted by an exceptionally tall, pipe-stem-slender stranger.

* * *

As I said, he was *very* tall, far and away the most treetop-tall individual I had ever seen. His complexion was dark, but not Negroid, more like the flushed coloring of someone too long in the sun, mottled in a subtle, unseemly way as if the pigments had washed in splotches and then run together. He wore a close-fitting, off-white jumpsuit that looked new and expensively tailored in a close-fitting way that struck me as uncommon. Heavily tinted dark glasses obscured his eyes, lending him a demi-sinister appearance. Something about his hair also looked wrong, though I couldn't put my finger on a reason for sensing "wrongness"

In a resonant, uninflected monotone resembling an artificial computer-generated voice, the too-tall stranger said, "Director Mattingly." It was a directed statement, not a question.

"Why, er . . . Don't believe we've met, have we, sir?"

The tall stranger disregarded the query. "I am Smith," he said, as if that answered everything. "May I trouble you with several questions?"

Despite being intrigued by the other's unusual appearance and deportment, Sir John bristled. "Sir, if you are from the media, I fear this is neither the time nor place for an interview."

Once again Smith showed no sign of having heard the director. "I was able to assimilate . . . your pardon, privileged to read your published account of data compiled from what, to use your term, was the . . . Centaurus Probe. May I inquire why that specific stellar system was chosen as the destination for your . . . ? For the pristine interstellar venture?"

"Chosen . . . ? Why it was . . ." The director frowned. As if mildly confused by the question, and perhaps conflicted as well when it came to framing an answer, he appeared to be readying a tart rejoinder, then for some reason hesitated. "Mr. Smith, you shall have to ask my predecessors," he finally said. "After all, the probe was launched more than a century ago."

It was definitely not the sort of response I'd expected to hear. I've seen Sir John cut better men dead for imposing on his privacy, and with Dame Mattingly standing there beside me and gawking, his compliant attitude about responding to the tall Mr. Smith's so blandly was startling to say the least. Something about the other's general appearance, added to his flat, monotonal utterances, had raised my hackles the first time I'd heard him speak.

"You are doubtless very much aware of the logical reasoning employed as the basis for the venture inspired and implemented by your predecessors," insisted Mr. Smith. "Would you mind making how it came about known to me?"

His nostrils flaring, Sir John once again seemed to be framing a withering reply, but further amazed me by subsiding as if confused as well as frustrated. I couldn't believe it when he said slowly, "Rather obvious, isn't it? Rigil Kentaurus and the trinary system's other two stellar

components are barely more than four light-years distant. That alone was more than sufficient to make our, uh . . . predecessors feel the probe a sole hope of obtaining significant extrasolar data without a many-generations-long wait. It also so happens that Rigil, the system's major primary, is a G₂V main sequence star moderately smaller than Sol, thus affording a huge bonus in being sufficiently similar to permit the return of extremely valuable comparison data to Sol. The likelihood of what were then known as 'Goldilocks' planets orbiting a primary at an ideal radius that increased the capability to sustain liquid surface water was repeatedly shown as applicable to Rigil via the occlusions that degraded its stellar constant, thus making the system, in addition to its relative proximity in light-years, an odds-on favorite to the team responsible for devising and setting in motion the probe project. As it came about, they backed a winner."

Smith did not immediately react upon hearing what amounted to Sir John's dissertation. After a second or two of silence, he said, "The metric you mentioned, light-years. One assumes it refers to the distance of photon propagation over a period of specific duration."

"Why, yes. Yes, of course, in this case the distance throughout one complete cycle of our planet about Sol, this system's primary."

I nearly choked on Smith's decidedly unusual "assumption." Most schoolchildren become acquainted with the meaning of light-year.

"I should also like to learn" added Smith, his artificial, unmodulated voice lending the request more solemn overtones than he might have intended, "how the very precise data in your published report was derived from weak, erratic impulses transmitted over such a relatively long number of light-years?"

I could have fielded that one on the first bounce, but certainly didn't expect to hear Sir John do so. His manner outwardly belligerent, as if preparing to tell this Smith person to bugger off, he said with what sounded like reluctance, "Why, the, uh . . . machine, naturally."

"Machine . . . ?" The query was so sharp it sounded a bit rude, although I didn't think that had been Smith's intention.

Sir John swelled visibly, but *again* the anticipated thunder and lightning failed to materialize, adding measurably to my surprise, and that of Dame Margaret as well, I'm certain. The director's brow furrowed. Visibly torn by some variety of internal conflict, he smacked his lips, shot a glance at me and revolved Smith's question. "Why, the . . . computer, the magna-frame complex here in Earth-Luna Station. We maintain a lasercomm link to the observatory so that our staff people are always able to . . ." He trailed off uncertainly.

After a two-beat pause that seemed to embolden Mr. Smith, he asked how the computer managed to differentiate between valid data and plentiful, random impinging energies.

By this time the director wore a harried expression. "Ah, but you see," he enlightened Mr. Smith, "radio frequency noise and other energies *are* random, and therefore non-additive. The data stream, continuously reinforced with each streaming transmission, gradually evolved into computer-augmented, authoritative data we employed to determine the precise orbital mechanics and compositions of not only the three very different, widely separated stars making up not only the Centaurus System primaries, but the twelve scattered planets and their satellites erratically orbiting Rigil's, Beta's and Proxima's common center of mass."

A lengthy silence ensued. I sensed wheels turning in the tall stranger's oddly elongated head. "Ingenious," he said by way of endorsing Sir John's explanation. "The approach is not merely sophisticated, but highly inductive."

Then without a nod, a thank you, a by-your-leave or anything else Mr. Smith turned on his heel and stalked up the aisle and out of the now deserted theater, his very much longer than normal strides carrying him away rapidly.

"Well, of all the . . . !" Dame Margaret stamped her foot in vexation — an unsatisfactory exercise under Earth-Luna's pseudo-gee spin — and clutched the back of a seat. Regaining her balance, she said irritably, "The nerve of that fellow! What brass! Who the devil does that peculiar looking giraffe think he is?"

The director's shrug of indifference furnished evidence of his relief at being rid of Smith, yet also gave me an added cause for wonder. His pretense of casually dismissing the peculiar encounter was not like him in any way, nor did it fool me or most certainly Dame Margaret. She knew her husband of many decades far too well, making it simple for her to see how forced his outward aplomb really was. Crow's feet had tightened the corners of his narrowed eyes; his hands palpitated slightly as he muttered, "Haven't the foggiest," and acted as if he wanted to say something else, but decided to hold back. "One runs across all sorts of . . . odd ducks," he finally declared a touch sheepishly.

"John, really! Whatever made you put up with that stringbeanish fellow's insolent manner *or* his insufferable questions?"

Mattingly drew a deep breath, and squared himself. "S'pose it seemed like the quickest, simplest way to get shut of the pest. My dear, pardon me. I have need to step in here." He cued me, shooting an unmistakable glance my way.

I excused myself and followed him into the men's room. Sir John studied his hands absently, holding them beneath an ultrasonic cleanser while waiting for pair of chatting gents quit the lavatory. When the sliding pocket door whisked into the bulkhead, he dropped the pose. "A most unsettling experience, Shore. *Damned* unsettling! This . . . Smith person, what did you make of him?"

"Very, uh . . . Highly unusual," was all I could come up with in the way of a response.

He reacted sharply, with a frown, probably thinking my reply a major understatement.

I realized how upset he was, groped for the appropriate tack, and said, "It surprised me no end to hear you . . . What I mean is, er . . . under the circumstances I thought you handled his impertinent questions . . . What I mean is, you showed a great deal of restraint."

"Rubbish! Don't I wish it were so. Would've sent the impertinent, 'highly unusual' Mr. Smith packing the instant he appeared, except . . ." He paused, looking distraught, regarding me soberly. "To state the matter succinctly, Shore, I was unable to do anything other than respond to the strange fellow. I won't have you think I've reached my dotage, but it was a great deal more than the his unusual appearance and manner that disadvantaged me, stultified my ability to speak freely. Deuced strange, it was. I found myself *wanting* to answer his ill-mannered questions, so much so, that I don't believe I could have told an untruth, or stretched the truth, had my life depended on it. It was a most unsettling experience, vastly disturbing."

I couldn't come up with an appropriate rejoinder.

“Heed me, Shore,” he said in a different voice, his pale blue eyes defocused in thought. “I should like to impose upon you for a small favor. Would you contact Earth-Luna Security in the morning? I want very much to see what the security jaspers can find out about this . . . Smith.”

“Glad to, Sir John. I’ll call first thing, urge them to run a background check on him.”

“Good, please do.” He still sounded indecently perturbed. “Let me know straightaway what the security chaps have to say. Can’t be too careful. As you are perhaps not aware, I happen to be privy to certain touchy informations concerning matters almost no one lacking certain credentials should learn about, and . . . What disturbs me more than anything else is what I touched upon a moment ago. Were this Smith to ask the wrong questions it would be . . . well, awkward a best, yet possibly quite damaging at worst.”

“I’ll take care of it first thing, Sir John.”

He responded with a blink, a halfhearted nod that conveyed more in the way of despondency than anything else.

* * *

I called first, then kept my promise to Sir John before boarding the Monday morning bus out to Galileo by stopping by the E-L Security admin office in Spoke Two. I spent fifteen minutes talking with a grizzled senior inspector who proudly announced that he’d worked in Earth-Luna ever since the complex was manned. He listened to my tale, his expression mildly skeptical, ending up with drooping eyelids and a curt nod. Swinging about, he talked to the computer, spelling out the name and the sketchy, physical description I had used to characterize Mr. Smith. He assured me that whoever he might be, the too tall stranger’s dossier would be available on the secure computer link to Galileo no later than the next day, or Wednesday at the latest.

The inspector called me at the observatory late Tuesday “afternoon” to apologize. He explained that a very thorough screening and complete check of E-L records had not turned up “not a single, cockeyed clue” about Mr. Smith’s identity, provenance, whereabouts or any other solid information. “All told, two individuals with that surname passed through the complex during the past week to ten days. None, however, came anywhere near being the exceptionally tall, odd looking individual you described. You and the Mattinglys are apparently the only people in E-L who even noticed his presence.”

“Noticed! Inspector, surely someone else had to recall seeing an individual of his stature and decidedly different appearance.”

“Sorry, doesn’t appear to be the case, Shore. I recall how you stressed the fact that he was exceptionally tall.”

“Two meters plus, with an unhealthy, or uh . . . unsightly skin condition. He also wore larger than usual dark glasses inside the holothrater, which struck me as particularly odd. On appearance alone, the fact that he towered above every normal person in the crowded E-L midway. How could anyone other than the three of us have missed him?”

“Umm-m-m, my thought too, but . . .” After a brief silence, he added, “Tough to believe an outsized character like that could be overlooked, but you told me the theater had pretty much emptied out by the time he appeared. Moving around here in E-L, often in freefall between bouts of artificial gravity seems to, er . . . tamper with peoples’ visual perception.”

“Not mine, nor most certainly the Mattinglys,” I assured him. “We not only saw him, but heard him voice the questions answered reluctantly by Director Mattingly.”

“Umm-m-m, yes. I understand. Yet honestly, Shore, we’ve checked-out the registers of both hotels, plus the few bed-and-board hostel here in the complex. We’ve scoured the inbound and outbound passenger records of every orbital shuttle, every inbound and outbound planetary vessel except . . . There is one exception. A recently departed military torch ship, *U.N.S. Corregidor*, is doing a constant burn, and the ion track blocks direct lasercomm transmission. But you don’t need to be told Smith’s chance of stowing away aboard a U.N. cruiser is less ‘n zero?”

I could think of no reason to disagree with his conclusion. “Even so, Inspector, would you mind checking later with the U.N. high command?”

“Surely, Dr. Shore. In the meantime, please tell Director Mattingly we’ll stay on top of it.” His flat vidicom image notwithstanding, the inspector’s body language and tone of voice led me to believe he’d forget about Smith, as well as my “crank” call for an investigation, soon’s he switched off. “I’ll buzz you pronto,” he promised, “if and when anything turns up.”

I thanked him, watched his image fade in the vidicom terminal.

Sir John was out of his office when I stopped by to fill him in. Later that “day,” I bumped into him as I came inboard after a session out in the freefalling x-ray module.

He listened to my negative report, grimaced indignantly. “Ruddy security Jaspers! Some thief could waltz off with our hundred-meter instrument and those dullards would never notice its absence. No sign of him, eh? Did the gentleman calling himself an ‘inspector’ actually have the brass to hint that Smith had never been inboard E-L?”

“Not in so many words, Sir John. He sounded as puzzled as we are.”

“Understandable I suppose. These days, Earth-Luna resembles an orbiting beehive. The gangling fellow could be holed up in some out of the way nook or cranny, but . . .” Looking pensive, Mattingly said, ““Let it go for the nonce. If he’s gone, he’s gone. But I certainly would’ve liked to learn a few details about that peculiar fellow.”

* * *

Having dismissed Smith and the whole incident from my mind, I spent lunchtime on Thursday with a pair of techs who’d been helpful during a long optical exposure of NGC 5128. The freefalling hundred-meter instrument’s three-axis stability is touted as being “ultra-precisely” controlled, but that degree of hyperbole is difficult to swallow at single gulp. I always try to con a tech into monitoring voltages during an overly extended optical exposure. Call it superstition, or whatever you wish; I insist that my digital images don’t end up with minor smears created by piddling voltage imbalances. Computers don’t care, but people do. Or should.

Explaining my stability assurance theory to the technicians who weren’t all that interested, I was between breaths, sucking on a squeezetube of coffee, when the commissary squawk box crackled, then blurted, “Dr. Shore to the director’s office. Dr. Roger Shore, puh-lease.”

“Oops!” The redheaded tech grinned. “What did you stick your foot in now, Rog?”

“Probably misspelled Galileo in my activity report.” My feeble attempt at frivolity earned only a pair of halfhearted, indulgent chuckles. “Later, guys.” Shoving the empty squeezetube in a waste bin, I headed for Mattingly’s office on the upper level.

The first glimpse of Sir John's arctic countenance, not to mention the intensity of the Medusa-like stare he pinned me with, made a shambles of my happy-go-lucky entrance.

Drifting opposite Mattingly's desk, the Raja was inspecting his fingernails with woebegone concentration. His failure to make eye contact with me aroused a suspicion that he'd most likely been caught with both hands in the cookie jar.

Wound tight emotionally, Mattingly was uncharacteristically tense, and terse. "Our mysterious stranger's put in a second appearance, Shore."

"Smith . . . ?" I didn't have to feign surprise. "Did the E-L Security run him to ground?"

"Bah! Those nincompoops couldn't find their own derrieres using both hands. Das found him, or rather *he* found Das. Jefferson, be kind enough to repeat what you told me."

The Raja and Dr. Mattingly share an identical specialty: stellar physics. Jeff earned a gold star on his shoe for his dedication and extra-effort in assisting Sir John during the correlation, refinement and editing of the massive amount of data returned from the Centaurus Probe. He also critiqued, edited and co-authored portions of the final report. "Working alone in the lab," he said, speaking a lot more deliberately than usual, "I was using vernier calipers to spot check the measurements of prominences on Rigil — accurate scalar printouts from the next to last transmission sequence — when something made me look up.

I had no trouble intuiting what would come next.

My expression gave me away. "You guessed it, Roger. The same tall, spooky looking gink Sir John talked about was floating in midair beside my desk. I reacted so violently it stretched my restraint harness, and stared half-paralyzed at the huge dark glasses hiding his eyes, and I guess he stared back at me the same way. I eventually found my tongue, asked who he was, how he'd gotten into a restricted quadrant of Gaileo. He was so gawdawful tall he had to curl up in freefall to fit himself into my office cubby, and with that weird skin condition, sort of blotched all over in a way that made him look —"

"I've seen him, Jeff."

"*You've* seen him?" A lack of understanding clouded the Raja's brown eyes. He glanced at the director as if to say, 'You didn't bother telling me that.'

Sir John motioned impatiently for him to continue.

"Anyhow," the Raja said, still eyeing the director mistrustfully, "the tall spook ignored my question, acted as if he hadn't heard one word. Then without preamble he started quizzing me about all sorts of esoteric criteria — what Rigil's solar constant meant to me in relation to Sol's, how we correlated the sodium emission spectra and stellar core temperatures of Beta versus Rigil. Specific indices like that, plus a few generalities to boot.

"And I, uh . . ." Das paused to lick his lips. "Hate to say it, but I answered every blessed off-the-wall question he asked with no thought at all about trying to find out who he was, or objecting in any way game of twenty questions. Fact is I, uh . . . Well, I just blurted it out, feeling like I *had* to answer him. His whole visit was, uh . . . I felt like a twelve-year-old schoolboy being questioned by the headmaster. There was . . . Call it a . . . well, a crazy sensation that failing to respond would not only be hopeless, but impossible. I literally couldn't help myself, couldn't fight against a real strong urge to come up with an immediate, direct answer to every single one of his questions."

The director fumed quietly in silence. “Jefferson,” he ventured, “what I did mention to you was my own experience in trying to combat, ward off or what have, the *exact* same sensation you describe, an inexplicable, uncannily strong desire to reply instantly, and hold back neither a nuance of meaning or any . . . Wait, let me rephrase that. For me, it was as if someone or something were standing over me, weapon in hand, *forcing* me to respond or forfeit my life.”

I puckered up, loosed a low whistle. “Smith here, in the observatory. How the hell did he get aboard Galileo?”

“Only wish we knew.” Mattingly pursed his lips. “For the sake of argument, let’s assume he used the same magical appearance, disappearance sleight-of-hand maneuvers practiced in the holothater. I had a private chat with the head dispatcher at E-L minutes after Jefferson reported the incident. To a man and woman, neither his people nor any member of the bus’ crew had any slight remembrance of carrying Mr. Smith, or anyone remotely resembling him.”

The director’s bushy brows knitted. He expelled breath, and said, “We shall make it our solemn duty to reconcile these odd happenings, and simply *must* find out who the fellow is, learn what he’s up to with his infernal question and answer rigamarole, why he insists upon bothering *us*, a gaggle of professionals working far from the madding crowd. One thing I guarantee is that in one way or another, with no question whatever, however difficult the task may prove of accomplishment, it *shall* be concluded to our complete and total satisfaction.”

Two - Cosmology

In this singular instance the director’s confidence proved misplaced regarding anyone’s ability to discover Mr. Smith’s identity, or anything else about him,. Not long after the Raja’s close encounter of the second kind, Galileo’s technical, administrative and maintenance staff personnel turned to and exhaustively searched every cubic decimeter of Galileo’s main structure, and overlooked neither compartment nor locker, nor the hundred-meter instrument’s freefalling module, nor each office cubby and lavatory and openable box in the corollary infrared, extreme ultraviolet, spectroscopy, and x-ray research modules. Our diligent search of the entire facility failed to unearth a shred of evidence tending to confirm the existence of Mr. Smith, or for that matter the fact that he had *ever* existed. The deepening mystery grew a damnsight deeper and more mysterious each passing “day.” Despite that, neither I or anyone else had any reason to doubt Jeff’s account of Smith’s visit in Galileo. Whimsical off-and-on raghead he may be, but the Raja owns a superior intellect. He’s also thoroughly reliable.

The following weekend passed quietly in E-L. Not long after disembarking from the bus on Monday evening, Sir John found a new target for venting his unhappiness. Unbeknownst to him, wild rumors had been circulated. Word of Jeff’s extraordinary encounter had reached one of our junior colleagues. Thinking to be helpful, the young intern from Manchester had taken it upon himself to alert British Intelligence to the mysterious comings and goings of someone calling himself Mr. Smith. A pair of MI-7 agents arrived in E-L aboard the morning ground-to-orbit shuttle, where they immediately clashed with E-L’s Security Director over jurisdiction in the affair, if an affair it became. Never let anyone tell you nationalism, or a provincial attitude such as, “Didn’t happened on my watch, so it *can’t* be true,” ends at the ionosphere.

The situation worsened when the United Nations Attorney-General's office involved itself. The crew of our bus and every professional and non-professional member of Galileo's staff underwent alternate grilling by teams of "experts." For those of us working in Galileo, the long-standing definition of 'expert' is and has been, "Anyone from out of town." Except for elevating assorted blood pressures, the sleuths accomplished nothing other than causing Mattingly to now and again lapse into near-apoplexy. In one heated session he told the investigators in no uncertain terms that in light of their fumbling, bumbling, stumbling methods of attacking the problem he planned to appeal directly to the Crown. Hearing that far-from-idle threat, the MI-7 agents, E-L Security people and U.N. investigators nursed their bruised egos, backed off a hair and pretended to cooperate with one another, although actually doing so would've been quite a stretch.

Separately and in concert, the snoops worked tirelessly to make a nuisance of themselves, and in the end managed to discover not the faintest hint of the potential identity or whereabouts of the tall but elusive Mr. Smith.

I used my scheduled hours a few subjective "days" later to oversee optical exposures in the hundred-meter instrument's prime focus capsule, which is a hassle. You have to work in vacuum out there, wearing cumbersome vacuum gear. I wanted to try NGC 5128 again using a new method of digitized, charge-coupled-device amplification and, since longer wavelengths penetrate gas clouds more readily than visible light, processed the exposed plates on a special red-sensitive emulsion. proved misplaced. A genuine fascinator, NGC 5128 is the twenty megalight-year-distant collision of a diffuse nebula and a spiral planetary, each with a major black hole at its hub. A showplace object, it blasts out many times the gamma, x-ray and radio frequency emitted by run-of-the-mill galaxies.

I came inboard shortly before noon, Zulu time, doffed the vacuum gear, stowed it in the main airlock service compartment, and dropped off the sealed package of plates at the lab for processing. After a quick lunch in the snack bar, I got back to my office cubby around one-fifteen, talked to the voicewriter for eight or ten minutes, working on the umpteenth revision of an overdue report.

To parrot the Raja's words, something made me look up.

He floated in midair under microgravity, his overly large, wider-than-normal soft boots a half-meter above the deck matting. Extra-tall, he had to hunch over to avoid bumping the overhead, stabilizing himself with one king-sized, mottled hand grasping a corner of the temperature-controlled cabinet where I archive photo plates.

In the same dead, uninflected voice that had given me chills in the E-L holothheater, he said, "Dr. Shore."

Scared, no petrified, I tried to leap from the fixed chair behind my desk, and would have succeeded but for the freefall restraint harness buckled around me, which made unconsidered movements a touch ludicrous. Mouth dry, my heart drumming paradiddles, doing its best to hammer a hole in my chest, I finally stuttered, "Y-you . . . shouldn't be in here, Mr. Smith."

"Since I am," he declared in the same eerie monotone, "may I trouble you with several inquiries about your work?"

It washed through me exactly as Sir John and Das had described — an unnaturally strong urge to comply. With every instinct shouting a warning, I had good reason to punch the vidicom

terminal and call for help. Instead, the unseen pressure to respond made me mouth the words, “Why, yes. Certainly.”

As if sensing my agitation, he said, “Be at ease, Dr. Shore. No harm can possibly come of my inquiry. The topic of the moment is I believe your specialty, physical cosmology. Tell me, what is your personal visualization of the universe in which we find ourselves?”

“I, uh . . . You mean in . . . so many words?”

“In the fewest words needed to provide a surface account of your personal interpretation, emphasis on ‘personal’.”

“But, I . . .” Doubly flustered by the general nature of what he wanted, I groped for an out. “It’s, uh . . . I find it extremely difficult . . . no, impossible to discuss cosmology with even the most intelligent close acquaintances, or other non-professionals. I’ve tried on more than one occasion, but it’s . . . If you were conversant with Armbruster’s work in unified field theory it might be different. Lacking such a background, it would be futile to —”

“Please, Dr. Shore,” declared Smith. “Your language is highly nuanced, endowed with rich shades of meaning. We shall dispense with symbolic logic, though you may take it for granted I am versed in what one might call the advanced fundamentals.”

I was badly shaken to hear him say “your” language, not ‘the language,’ mind you, or ‘our language,’ but *your* language, a usage that held a disturbing connotation. I clutched the only available straw that might let me to learn something about him. “I assume you’re not . . . You’re saying Standard English isn’t your native tongue?”

“It is not,” he said, “which is neither here nor there. Physical cosmology, if you please, Dr. Shore. Generalities will more than suffice, surface features.”

Whoever Smith was, I remember thinking at the time what a slick touch he had when it came to enticing strangers to tell all. No longer simply compliant, I was driven by a strong urge to respond. Briefly revolving, the problem of where to begin a subject that all-encompassing, I drew a deep breath and pitched in. “Many colleagues consider my view of the universe much too conservative for remaining devoted to the classic Penrose-Hawking-Steinhardt model. It loosely describes the universe as existing in a four-dimensional spacetime plenum resulting from the original, er, gravity-driven singularity commonly known as the ‘Big Bang,’ which theoretically accelerated in the inflation mode, accompanied by a small positive cosmological constant.”

“Proper names are meaningless, and models unimportant. An accelerated inflation into what type of spacetime realm, Dr. Shore?”

“That is . . . Well, it’s sort of a trick question. I’m aware of no scientific answer that fits all of observable criteria, or any of the correlated puzzling discontinuities. For example, why are there more particles than antiparticles in the observable universe? Yet answering that and other puzzles I will happily leave to the particle physicists. My interest is in grand-scale structure formation — the evolution and coevolution of quasars, galaxies, clusters, superclusters and so forth. Weak lensing — the distortion of a distant image by gravitational bending of the photon strings around a star — is one of the most useful tools. Another is measuring light absorption from distant quasars via neutral atomic hydrogen.”

“I assume the practices you’ve chosen to mention are widely accepted?”

“More or less prevalent, at least until better means and methods of obtaining results come along.” I paused, not knowing which further path to take.

As when he had confronted Sir John in the holothheater, Smith remained outwardly nonplused by my simplistic statements. “You spoke of an expanding, inflationary universe,” he said with the same maddening lack of inflection. “What is the present limit of your cosmological search?”

“Uh, roughly thirteen-point-five times ten to the ninth power light-years. Redshift data indicates that quasars occurring at that extreme distance — a few colleagues still refer to them as ‘horizon objects’ — emit ‘look back’ light dimmer than that of relatively nearer quasi-stellar sources, a hint that the primal singularity was theoretically responsible for jump-starting time in the physical universe.”

“The singularity you term ‘Big Bang’?”

“A colloquial term,” I told him, trying not to sound apologetic. “There are also the, uh . . . We call them Blue Fuzzies . . . Whew! Mr. Smith, everything I’ve said is a gross understatement that —”

“Blue Fuzzies . . . ?”

“Another colloquialism. When the hundred-meter instrument gathers light from an apparently empty sector of the sky during very long exposures, charge-coupled optical detectors do their utmost to amplify the extremely faint images, which are then computer-processed. The objects, whatever they may be, are so distant and redshifted that their estimated recession velocity is high, but by no means as enormous as logic says it should be.”

“I see. Do you view the universe boundless, Dr. Shore?”

That one stopped me. “Wish there was an easy answer . . . Well, ‘boundless’ infers . . . infinite,” I said hesitantly. “That doesn’t strike me as a reasonable a postulate, yet I have no specific basis for an opinion one way or the other. The weak force is always attractive, never repulsive. Redshift expansion of the universe must mean gravity is restricted, possibly due to the presence of dark energy, or it would be contracting toward what’s colloquially known as “The Big Crunch.”

“Dark energy . . . ?”

“Yes. An anti-gravity component apparently exists in dark energy to permit continuing expansion. Early twenty-first century physicists determined that dark energy represented seventy-plus percent of universal energy, and dark matter some twenty-plus percent of all detectable matter in the universe, with visible matter on the order of only four percent.

Mr. Smith seemed to accept this definition. “The ‘horizon objects’ you mention,” he said. “Would it be possible to examine an example?”

“Some exposures are there in the file.”

Smith obediently pushed away from the cabinet, drifted toward the closed hermetic hatch of my compartment, effectively squelching my subliminal notion to bolt into the passageway. I none too steadily unsnapped the restraint harness, opened the file.

He moved close beside me, exuding a faint musty odor I couldn’t identify, and waited there patiently while I mounted several printouts in the hold-down fixture — excellent digital negatives printed on the new ultra-fine emulsion developed in Galileo’s lab.

Smith studied them intently. “What are these superimposed indices, Dr. Shore?”

“Comparison spectrograms indicating various wavelength redshifts?”

“Redshift? You have used that term more than once, the Doppler effect in a certain portion of the spectrum in your lexicon, is that not so?”

He'd done it again, saying 'your' lexicon. Nearly choking on the term, I swallowed with difficulty. Despite my earlier apprehension about discussing cosmology with a lay person, I began to appreciate how astute the impossibly tall Mr. Smith actually was. “Yes, correct. Redshift calibration,” I added, “indicates the extreme distance of an object. Deduction tells us the background radiation detectable in every direction, in all portions of the sky, has apparently slipped even farther, and in fact all the way out of the angstrom band into gigahertz microwave frequencies. It tends to support evidence of the primal singularity. The, er . . . Big Bang.”

“Is that inference based solely upon what you call 'redshift' measurements?”

“Basically, yet not entirely. There are other subtle indicators, but they, uh . . .”

Smith startled me into silence by pushing away from the desk. His overly large head turned slowly until he stared directly at me, the opaque lenses of the large, ovoid dark glasses he wore making his blind gaze doubly unnerving. Then, as if a switch had been thrown, the subliminal urge to comply with his interrogation doubled in strength.

“Dr. Shore, you have been most helpful, which is something I sincerely appreciate. I hope you will accept my apology for impertinently posing one final question, then I shall leave you to your labors. Have you any specific knowledge of a program aimed at developing a faster-than-light space vehicle?”

“FTL . . . ?” I didn't have to think about how to answer. “No, none that I'm aware of. Mr. Smith. There has been conjecture aplenty for quite some time, but no matter how many varied concepts and theoretical approaches have come along the development and engineering is still a good way off. We thought thermonuclear fusion was a tough nut to crack, but it turned out to be child's play compared to FTL. I suppose sometime in the future it may become a reality, but who knows.”

“Then you personally have no knowledge whatever of a program aimed at furthering that objective?”

“Absolutely not, Mr. Smith,” I said. “Frankly, in my opinion the time to attempt building that particular railroad still a good way off.”

“Railroad . . . ?”

“Sorry, a figure of speech.”

“I see.” Smith pulled himself back toward the file cabinet. “Would it be possible to view some studies of nearer objects?”

“Certainly.” I dragged out a few showpieces: the Veil Nebula exposed in blue light, the Lagoon, NGC 5364 in Virgo, and an awe inspiring plate of our near-neighbor, M31 in Andromeda, which apparently interested Smith more than any of the others; at least he inspected for many more seconds. Most laymen are lost without a positive printout, preferably in color. Smith's intense study gave no indication that he had the slightest difficulty reading negatives. Whoever he was, I decided he was no layman in any sense of the term.

At length he said, “thank you, Dr. Shore.” He turned in midair, pushed himself away from the file cabinet, uncurling a bit as he vectored toward the hatch.

Without knowing how I knew, a peculiar sense of abandonment came over me, an intuitive impression that I would never see Smith, or talk with him again. “Mr. Smith, would you

mind explaining yourself? Dr. Mattingly's work — the work of everyone aboard the observatory — has been interrupted by investigators trying to track you down."

"Regrettable," he said, as if that answered everything. A towering, partly curled up specter in a topaz jumpsuit much too wholly enigmatic to be real, not to mention the Olympian inscrutability behind the heavily tinted shades covering his eyes, and hiding I knew not what, he clutched the handle of my office cubby's hermetic safety latch. "The information you request would not be beneficial in any way, but might cause a measure of irrevocable harm. Forgive me, but I can tell you nothing more. However, since you have been so extraordinarily helpful I will leave you with a . . . Shall we say, a hint? There is a term in your vernacular: 'a red herring,' you would do well to contemplate at length, and while so doing it would be wise to think positively. I wish you huge success in all of your present and future scientific endeavors."

He had to bend from the waist and contort himself to squeeze through the hatchway.

It took me several seconds to remember to breathe again, then unbelt and launch myself to the open hatch.

The passageway outside my cubicle was deserted in both directions.

* * *

E-L Security, the U.N. investigators and the cloak-and-dagger British ops up from London took turns putting me on the carpet, then congregated and took part in the prime inquisition. They grilled me twice in E-L, and again out in Galileo, trying every which way to shake my story. Now and then Sir John would pop into the dungeon where I was being tortured, not with hot irons, but rather with tired questions asked over and over again, then rephrased repetitively and asked again and again. The director would hover from time to time and listen in, his manner that of a dyspeptic thundercloud. Then he would storm out more angry than when he had stormed in. In the midst of one lengthy session in Galileo, I tuned out the current question long enough to recall having used the voicewriter when Smith first put in an appearance, and mentioned the electrifying fact that I had *no* recollection of turning it off, hence the computer surely must have stored the audible portion of Smith's visit.

As an item of significant, late-breaking news, it created a burble of rabid excitement. A pair of E-L Security types were sent hustling to my office compartment to recover the data disc backing-up the resident memory of the mainframe-in-a-matchbox computer I use at the observatory. In something of an antagonistic mood during the interim until they returned, I paid a visit to the lavatory, slugged my fourth or fifth squeezetube of black coffee, and tried unsuccessfully to relax.

When the E-L security detective and his associate returned looking pleased, and told me congratulations were in order. They had found the voicewriter still merrily recording the silence in my office. I took the duped disc, inserted it in Mattingly's playback unit and fast-forwarded past the esoteric, unedited mishmash making up yet the draft of my tardy report, letting my spiel run its course all the way to the partial sentence I'd uttered before Smith's uninvited appearance.

And received the second biggest shock of my life.

The playback contained only *my* words. In abject disbelief, I listened to myself tell Smith he wasn't supposed to be there, listened in open-mouthed wonder to the ensuing silence during which Smith had expressed his intention to question me. My explanation to the investigators was punctuated by gargling, air-sucking noises I didn't seem able to stop making.

The grizzled E-L Security Inspector who'd sloughed me off the previous week when I'd asked him to check on Mr. Smith didn't bother to hide his simpering grin. All of the other Sherlocks, foreign and domestic, exchanged knowing glances.

Wearing a profoundly unhappy expression, Sir John declined to meet my puzzled gaze. Toying with a gold-washed stylus as if he meant to use it like a dagger, he glowered at the assorted snoops like an entomologist deciding on which specimen to prepare for dissection and pin to his board. At last he popped the stylus into the freefall clip on his desk and ordered everyone out of his office in a very few choice, frost-rimed, not-to-be-argued-with words.

Once the hatch of his office closed behind the snoopers, I spoke over the continuing playback, informing the director that Smith's cosmology questions had been a good deal more than basic, and far more meaningful than my fumbling, simplistic answers.

"Dr. Mattingly," I concluded, "I received a very strong impression that Smith had damned little interest in hearing any of the malarky having to do with my cockeyed version of cosmology, he wanted to know about *me*, wanted to know what I knew."

"Um, yes, possibly, possibly. Shore, I confess that I felt much the same back about Smith back there in the holothetre." Folding his arms, he cocked his head in a stoic pose and listened to the remainder of my off-and-on soliloquy in stony silence.

Suddenly he gasped for no apparent reason, eyes wide, and cried, "Good Lord!" Bending quickly, he switched off the playback, turned to me open-mouthed, shock in his eyes. "Roger, be so kind as to go and snap the lock on my office hatch."

In something of a daze, I did as requested. "I know how hard it must be for you to believe what I said in that last bit, but you have to appreciate —"

"Believe . . . ? Don't talk nonsense! Of course I believe you, believe you implicitly." He meditated for several heartbeats. "Just before silencing the playback, you mentioned theoretical methods of achieving FTL, future engineering, so forth and so on. May I ask what prompted those comments?"

Relating Smith's interest in the topic, I quoted his direct question exactly as I had remembered it. "He asked if I knew of a program aimed at developing an FTL space vehicle."

Looking haggard, Mattingly drifted around to the other side of his desk, pulled himself down into the chair, his slumping body language making him look defensive. He demanded to know if those had been the exact words of Smith's query.

"Maybe, maybe not, but very close — definitely the sum gist of his question."

The director squinted accusatively at the playback unit. "Ruddy awful!" he declared explosively, and cut another withering glance at me, then looked away quickly. "I believe we'd best hear the remainder of your playback."

Interrupted by disturbing periods of silence, the disc wound on while I subconsciously recreated Smith's lost questions and comments in my mind. Sir John hung on every syllable I uttered. When the playback finally went silent, he restarted it again from where I stopped talking my report, and asked a bit aggressively if I would mind going through it again and reconstructing as best I could Smith's portions of the now one-sided "dialogue." After several false starts and stops, I spent more than three-quarters of an hour filling him in on the blanks.

Ejecting the disc, he asked permission to lock it in his office safe, then cleared his throat repeatedly, a staccato preamble to saying something intended to gain a listener's total attention.

“Would you mind terribly, Roger, if I asked you to wipe the record of the, uh . . . entire one-sided conversation from your mainframe-in-a-matchbox computer?”

“No problem, Sir John. I’ll dupe the draft of my report, the delete the rest.”

“Good, good. Please do so at your earliest convenience. Tell me, have you any notion at all what the cheeky bastard meant by cryptic parting remarks you reported?”

“A hunch,” I said. “No, maybe more than that. The obvious implication of ‘red herring’ is that the redshift hypothesis is a bogie. We might also reconsider rethinking several other —”

“A . . . bogie?” He frowned.

“A ringer, Sir John. An invalid premise. A null hypothesis.”

“Um, yes. Believe I see. Yes, quite.”

“The other shoe he dropped could mean we’re off base in thinking of the spacetime foam as negatively curving back on itself.”

“Off *base*? Really, Shore! I often think your Americanisms were evolved with the sole purpose of trying my sanity.” Wagging his head, he added, “Speaking of implications, your encounter with Smith, plus the, er . . . In addition to what you referred to as the ‘faulty’ recording which derived from it, implies something immensely more than overwhelming. You yourself ‘heard’ Smith, just as the three of us did that evening in the holothheater, or Jefferson did here in the observatory. Yet not a single utterance he made activated the computer’s audio pickup. What does that imply?”

“Telepathy,” I said in a weak voice. “I thought of it in passing, but . . . You commented on his totally uninflected speech. If such a thing as telepathy does exist, maybe that’s how mental communication works.”

Preoccupied with his own thoughts, Mattingly did not respond.

I finally screwed up the courage and said what had been on my mind all along. “After he disappeared, I stayed there in the office for a short time, thinking. Call it intuition, guesswork, whatever you wish, but I couldn’t put aside the notion that his cosmological questions and all the frou-frou that went with them were part of a game to soften me up for the twenty-four-trillion-dollar question. Sorry if I’m out of line, Sir John, but I have to ask if there *is* an FTL program in the works?”

Once again the director went through his rapidfire throat-clearing preamble, and uttered an evasive statement that obviously made him uncomfortable. “I fear it is not a fit topic for conversation, Shore. I deeply regret my inability to say more, it’s just that . . . Please try to understand that I’m not at liberty to speak freely. If that sounds officious, I hope you’ll find a way to understand that I’m not really being unreasonable.”

“No problem. I think I understand.”

“I’m quite certain that cannot be true, and yet . . .” A bleak grimace I interpreted as frustration clouded his aristocratic features. “Being who you are, Roger, as well as what you are, you have doubtless considered the potential ramifications of Smith’s stealthy visitations, not to mention the insufferable twenty questions game he insists upon playing, or the manner in which he somehow forces each questionee in turn to play his game *his* way, *or* the unknown manner in which he appears before you and departs unseen. I chanced to be his first target, or perhaps it took place by design; we’ve no way of learning. Then Jefferson was targeted, and most recently you. I refuse to have you believe for one instant that I’m being in any way patronizing when I

say you are far too intelligent not to have drawn the same inevitably conclusion as I myself, no matter how outrageous and untenable such a conclusion may sound.”

“A visitor from . . . out there.”

He snorted. “Sounds like ruddy foolishness when one bites the bullet so to speak, then comes right out and articulates the indecent postulate. Yet, there it is! Upon close examination of the aforementioned ingredients, no other explanation strikes me as either likely, or for that matter remotely possible. We have Smith’s inexplicable appearances and disappearances, plus several inferred telepathic communications, all capped by a truly ingenious method of extracting answers whether or not one wishes to *supply* them. Tote those factors, integrate them, and it makes the suspicion of harboring an extraterrestrial presence all but inescapable. It’s the only rationale I can conceive of, so I suppose we shall have to . . .”

He broke off, scowling, pushed himself away from the desk and drifted over to the peek-a-boo set flush in the curving, padded bulkhead of his office that resembled a porthole on steroids. The louvers were open, and at the moment Galileo happened to be passing through Earth’s umbra. A tracery of unwinking stars were splashed across the peek-a-boo’s narrow field of view.

“Roger,” the director said, sounding distant, “perchance do you recall Biron’s memorable lines from the play we saw on the evening Smith first put in an appearance?”

“Afraid not, Sir John.”

Mattingly closed his eyes and pinched the bridge of his generous nose, the burden of his years weighing on him heavily. In round Shakespearean tones he solemnly recited a quatrain from *Love’s Labour’s Lost*:

*“These earthly godfathers of Heaven’s lights
That give a name to every fixéd star;
Have no more profit of their shining nights
Than those that walk and wot not what they are.”*

Neither of us had anything to say for the best part of a minute. He finally pushed away from the peek-a-boo and straightened, a curious light in his eyes. “Come,” he said with what sounded to me like rejuvenated vitality. “We shall ride the bus back to E-L, straightaway hie ourselves to the Earthview Room and do what sane, sensible gentlemen do when confronted by a less than sane and sensible situation.”

“Not feeling too sane and sensible myself, Sir John. What have you in mind?”

“I suggest, dear bewildered colleague of mine, that we get roaring, falling-down drunk. Yes, that is *precisely* what we shall do.”

We did.

Three - Alexis

The succeeding “days” passed uneventfully, while Dr. Mattingly’s disposition turned stone-cold. He fended off each and every investigator with word that we were far too busy to bother with further fruitless interrogations.

A week to the “day” after our binge, I dragged home from Galileo and found a recorded message requesting me to call Sir John “with urgent dispatch,” which translates from UK talk as

“right now, this minute.” It was a very surprising message in light of the fact that I’d spent the “day” in Galileo, within hailing distance of the director’s office. I used the cheap, audio-only phone that came with the lease on my tiny E-L apartment, and rang the Mattingly’s suite.

“So glad we made connections, Shore.” His image all charm and a smile in the vidicom panel, Sir John apologized for causing me bother and all that. “Listen, could you possibly dash over to our quarters straightaway? A terrible inconvenience, I realize, yet quite important.”

“Das and I were meeting for supper. Can it wait till after we — ?”

“Stuff and nonsense!” he interrupted, sounding excessively jovial. “Jefferson is also on his way over here. Margaret’s in the act of fixing us a bite.”

“Fine, if it’s not too much trouble.”

“Splendid, splendid! We’ll expect you shortly.” He rang off.

Far across the “wheel,” and inboard two “tires” from my humble bachelor’s hole in the wall, the Mattingly abode is a posh three-room suite Dame Margaret refers to as, “Our home away from home.” I took the lift in Radial Two “down” to the hub, scraped elbows with a few longshoremen — why they’re called “longshoremen” eludes me — and other blue-collar types in the outer dock area. After riding “up” in Radial Eight’s lift, I ducked across to Peripheral Three, counted segments and stepped off the slideway in the corridor not far from the Mattinglys’ entry.

Good old Jefferson Belal Das turned the opposite corner just as I reached out to tap the doorbell button. “Why,” hailed the distant Raja, “is a low caste fellow like you skulking about in this fancy high-rent district?”

“Are untouchables like *you* really welcome here?”

“The question you should’ve asked is, why the imperial summons? Any clues?”

“No, I’m fresh out.”

Jeff forced a stage pout. “Over vidicom,” he said, “Sir John’s surprising invitation sounded more than a touch overeager. My instincts make me wary of directors who tender impromptu dinner invitations.”

“Your instincts,” I accused, “were transplants from India. You ragheads are all wary, and hungry.”

“Ah, India!” he said with practiced stagecraft reverence. “The crux of civilization!”

“According to the latest UNDEP environment and population statistics, I’d say it’s more like the crotch of civilization.”

“Your deliberate unkindness is uncalled for, Roger.” He grinned his patented ivory-laden grin. “Forgo the badinage and insulting remarks, cosmological colleague of mine, and ring the ding-a-ling. I’m dying to learn what we’ve done to annoy the *Pukka Sahib* Mattingly.”

Looking prim and out of character in a flowered white apron, Dame Margaret answered the chime. “I do hope you gentlemen won’t mind something from the microwave. John *never* lets me in on his plans until the very last instant. Typical!”

I barged on into the parlor, letting the Raja murmur appropriate clichés to Dame Margaret, and hesitated in the doorway. Clad in a stylish aquamarine jumpsuit, an Afro gentleman of imposing stature had risen lithely from the divan. Dwarfing Mattingly in every dimension, a split Moorish beard complemented the intelligent sparkle in his wide-set dark eyes. His expression slightly at odds with his look of self-contained competence, he let Sir John perform the introduction.

“A pleasure, Dr. Shore.” The large, sinewy right hand of Paul Nobotts wrapped itself what seemed like twice around mine, exerting firm yet reassuringly gentle pressure. The overall impression I received was one of strength, poise and integrity. After being introduced to the Raja, Nobotts regarded us soberly, and sat down again. “Sir John and I have been acquainted for a number of years,” he said with a faint accent I couldn’t put my finger on. “He has related in detail the odd circumstances surrounding the appearances of a mysterious individual named Smith. If it’s agreeable, I should like to ask a few questions about your encounters with him.”

I glanced at Sir John, who promptly returned an affirmative nod, “My trust in Paul is implicit, gentlemen. Feel free to confide in him anything you might say to me.”

On that note, we adjourned to the director’s study, where a heatless though convincingly real phony fire crackled in the hearth. Stranger or not, his straightforward, no nonsense manner made Nobotts easy to listen to, and equally easy to converse with. In the wake of no more than a few minutes of small talk, we were on a first-name basis.

“Roger,” he said, turning to me after posing a few simple questions to Das, “is it fair to say you felt the same compulsion to respond Sir John and Jeff experienced?”

I revolved the statement. “Compulsion may be a tad strong. To me, it was less overt than that, at first more like a subliminal urge to . . . Not sure how to describe it. Closest I can come is to say he projected a good feeling about himself, the good vibes that come with discussing something over with a sympathetic listener.”

Das confirmed my observation. “Actually, Rog has good handle on it. From me, it was like he was on your side, a trustworthy someone you willingly took into your confidence.”

“The only time I felt a definite compulsion to answer him,” I put in, “was when Smith asked pointedly about FTL.”

Nobotts looked so startled I thought he hadn’t heard me clearly. “By FTL, I meant —”

Reacting with spastic suddenness, Nobotts shot a forefinger to his lips. He subsided, glanced at the director, who went through his throat-clearing preamble, but didn’t say anything. He looked away quickly, without a change of expression.

“Roger,” pursued Nobotts after a brief, uncomfortable silence, “Sir John let me playback the voicewriter recording of a report you were dictating when Smith appeared aboard Galileo. He filled me in, according to his best recollection, on the missing portions of the purported . . . Of the dialogue between yourself and Smith.”

For no particular reason I began feeling uneasy, feeling put upon for some reason. “I know how hard it is to believe Smith did what he did, but I assure you —”

“Please don’t misunderstand, Roger.” Leaning forward earnestly, Nobotts said, “My reason for asking you about the incident . . . There’s no question of disbelief, not in light of what has also occurred between Sir John, Jeff and this . . . Smith person. I would very much like a chance to discuss the matter with both of you at greater length. Would you and Jeff mind adjourning to my ship after dinner? Would that greatly inconvenience either of you?”

“I suppose not,” I told him.

“And you, Jeff?”

Exhibiting his usual brand of tact, the Raja said, “Not to be nosy, Mr. Nobotts, but will you be offended if I inquire who you are, how you’re involved in this peculiar Smith affair?”

“Gentlemen,” interceded Sir John, “haven’t I explained that I have every confidence in Paul? I’d much rather you saved your questions until . . .”

Nobotts lifted one oversized hand, silencing the director. “It’s all right, Sir John. I’m convinced Roger and Jeff have a legitimate right to know who I am, as well as my reason for being here. After all, is it fair to ask them to submit to questioning without an explanation? Not, I’m sure, after the interrogations they’ve already gone through trying to satisfy the authorities.”

The director blinked, nodded reluctantly.

Nobotts turned back to us. “I represent a clandestine agency sponsored by the administrations of more than one Western government. I’m afraid that’s all I’m free to tell you at the present time. I sincerely hope it will be sufficient. Please accept Dr. Mattingly’s assurance that my affiliation with the, er . . . agency, plus the personal dealings I have had with Sir John, , leave me totally sympathetic to you, to your personal involvement in this strange affair.”

Just then Dame Mattingly called us to dinner. We sat down to an excellent bouillabaisse, grilled sole, tiny dumplings and a salad of mixed greens. It was difficult to believe the meal had ever been frozen; I suspected her of having ordered dinner for five from a caterer while we’d been gabbing. Or maybe not. In any event, dining cut short any further “quizzing” efforts Paul Nobotts might have had in mind. We chit-chatted about nothing in particular, trivialities mostly having to do with the trials, tribulations, joys and sorrows of periodically living and working in space. Knowing the director, he would have cheerfully lopped off either foot before allowing resembling serious conversation while dining.

Over brandy in the study, now that we were much more comfortable in each other’s presence, we batted astronomy and the pitfalls and triumphs of our profession back and forth for a while, then adjourned to Nobotts’ ship. Jeff and I thanked Lady Mattingly for having us to dinner on such short notice, and the four of us trooped “down” to the nadir docks in no-weight. Shortly after nine o’clock, lacking stated reason for abandoning the Mattinglys’ suite, we boarded Paul’s “private yacht.”

* * *

Having no preconceived idea of what to expect, I was unable to hide my surprise after pulling myself hand-over-hand through the umbilical tube into a spacious midships airlock service compartment. Racked on the bulkhead beside the airlock, a half-dozen pressure-suits with a utilitarian off-white matte finish were bereft of not only distinguishing insignia, but markings of any kind. On the opposite bulkhead were bracketed a quartet of laser rifles, and an assortment of flare pistols, oxygen hoses, fittings, spanner wrenches and other gear, all secured in their proper places with military precision.

“Standing” on the Velcro deck matting in a wrinkled gray jumpsuit, a square-jawed, rangy young man with a burr haircut and a no-nonsense expression silently watched us exit the airlock chamber one by one.

“Gentlemen,” said Nobotts, “this is Steve, our astrogator and pilot.” He said it more in the manner of a dismissal than as a matter of courtesy, as if introducing us to a watchdog. “Shall we go aft to my cabin?” invited Paul, and led the way aft.

Tugging ourselves along a companionway strung with freefall safety lines, I lost count of turns and decided Nobotts had not been bragging about having at his disposal a large, classy yacht. He ushered us into a Spartan compartment furnished with dual foldbunks, a collapsible

desk cantilevered from the bulkhead, and four fixed chairs equipped with restraint harnesses. Urging us to belt in, he did likewise after pulling himself into a seat behind the desk. I remember thinking it odd to use restraints when we wouldn't be under acceleration. On general principles, I followed the lead of him and the others.

My alarm circuits jangled not long afterward when soft pressure pops in my ears made it hard to hear whatever was being said. The ship had sealed itself off from the station's nadir berthing stack, meaning either Nobotts insisted on total privacy, or . . .

"Are we flying off somewhere?" asked the Raja, his tone of voice conversational.

Intended to be reassuring, Nobotts' ivory-laden smile did not quite make the grade. "I hope you won't mind," he said, "if we make an orbit change and visit Xanadu. At this juncture, I think it would be an excellent idea for you and Roger to meet someone who makes her home there. Sir John and I are both certain you thank us afterward for the opportunity."

As reassurance, his words fell flat. "What," I asked, "if I'd rather not leave E-L?"

"Really, Shore," put in Sir John. "A short, simple excursion shouldn't trouble you."

Nobotts offered a reprise of his reassuring smile. "I promise you and Jeff will be home in time for breakfast."

Mattingly managed to avoid my questioning gaze by inspecting the compartment's featureless overhead. The ship's torch rumbled, a subdued low-frequency groan accompanied by a slight, all but imperceptible vibration, and we all gained a smidgen of weight. Instinct made me begin to wonder if Nobotts was actually the paragon of integrity attested to by Sir John.

Although I'd heard any number of stories about the posh, ultra-exclusive habitat, I had of course never been to Xanadu. Tourists are not encouraged to visit the exclusive worldlet, which by reputation is the Solar System's Park Avenue-plus, with a huge dollop of "plus."

In the early nineteenth century, a revered French mathematician, Joseph Lagrange, proved with complex symbolic logic that each of the planets effected two nodes of gravitational equilibrium, one preceding it on-orbit, the other chasing it in its path around the Sun. Draw an equilateral triangle with the base leg extending from Earth to Sun, and the vertex occurs at one of these Lagrangian Points, where matter can collect without being affected by the passage of time, gravitational tides, or hardly anything else.

At Earth's preceding Lagrangian Node is Xanadu, three kilometers in diameter and over eighteen clicks in length. A unified megastructure, Xanadu puts Egypt's pyramids in the shade, enclosing the most stupendous interior volume ever devised by human minds and hands. The permanent, highly selective population of less than one hundred thousand lives under the half-gee of pseudo-gravity provided by rotation about the major axis. The worldlet's ideal climate is powered by thousands of square kilometers of sophisticated solar energy panels power-linked to the structure via microwave transmission. People are born, live and die without ever leaving Xanadu. There are farms, chateaux, stock animals, "blue sky," trees and grass. Catch is, it takes a very great deal more than an ordinary income to so much as *think* about qualifying for residency, and as a matter of fact a good deal of *very* much more.

And even then, so I've been told, you have to be approved by the residents council.

Conversation was desultory during transit, an atmosphere hinting that some form of conspiracy was active. The notion of being borne away without granting more than token consent put a damper on the Raja's spirits as well as my own, nor did it improve my disposition. I felt

less inclined to cooperate with Mr. Nobotts' interrogation whether he represented friendly or demonic governments.

The ship docked in less than an hour at Xanadu's semi-deserted berthing port. Emerging from the umbilical tube, we were met at the airlock by a security official and a pair of armed, nattily uniformed guards. Apparently Nobotts owned special privileges. Displaying his credentials, he passed no more than a few words with the security chieftain on duty, who admitted us to the spin elevator without further question or delay. The ship's taciturn pilot, Steve, tagged along toting a slender metal transit case.

It's a fairly short ride "down" from no-weight at the long axis center of Xanadu's rotating hub to the inner periphery, where everything possible has been done to sustain the illusion of open countryside. Even the rows of solar simulators acting as "suns" for the enormous cylinder's opposite quadrant are disguised to look like low hills at eye level; if not for that, curvature of the gigantic cylinder would reveal the fact that there can be no horizon. The illusion of open country is spoiled only if you look "up" at the opposite landscape hanging inverted above you in the blue haze of distance. Xanadu may be an idyllic place to live, but I was not at all certain I'd enjoy the "privilege" of visiting the worldlet.

We boarded a small six-seat rig resembling a golf cart on steroids tricked out like the Surrey with the Fringe on Top. The pilot, Steve, drove, trundling the silent electric vehicle along a country lane that wound between a lush meadowlands where several horses grazed, and what looked at a distance like a field of near-ripe sweet corn. Through rows of poplars, great houses came in view hunched on nearby hillsides doing their best to conceal solar simulators.

The surrey swept around a curve, and a quaint, half-timbered Tudor cottage nestled in a sparse grove of sycamores appeared. Everything about the cottage bore the "picturesque" label, including the woman bent over pruning roses in the shade of a blue-flowered jacaranda that overspread the emerald lawn. The woman in a flowered dress and pert bonnet laid aside her shears, pulled off her gloves one finger at a time, shaded eyes and looked us over.

"Why, Paul! Who's that with you? Oh, John, John!" Gathering her skirts, she skipped through an opening in a white split-rail fence with lightfooted grace under Xanadu's mild pseudo-gravity.

Mattingly stepped down from the surrey, embraced her enthusiastically. He stood back and examined her fondly, patting her shoulder with tender affection.

"John, how absolutely delightful, and so unexpected! How've you been?"

"Quite well, thank you, Alexis. Having a good rest?"

"Simply marvelous! I've been home nearly two whole months, and it seems like forever. How is Margaret, and your work?"

All smiles, Sir John told her everything was fine. "Maggie sends her warmest regards. The observatory is muddling through, as always. Here, Alexis," he said, turning to us. "I'd like you to meet a pair of colleagues. Gentlemen, this is Dr. Alexis Lemmon. My dear, here with us are a pair of distinguished astronomers, Dr. Jefferson Das, and Dr. Roger Shore, a pair of sterling professionals attached to our Galileo staff, stout fellows both."

Seized by a fit of Bengalese gallantry, Jeff mumbled his pleasure and actually bowed over her hand. I kidded him about it later.

Then Alexis said, “Charmed, Dr. Shore.” She let me wring her limp fingers, and at that first touch something clicked. No, two somethings.

A clue no one could overlook, her surname told me I’d been introduced to a major celebrity, the daughter and sole heiress of a two-time Nobel laureate, the late Alexander Lemmon, once the heavyweight champion of particle physics. Several years after I was born Lemmon had conceived, developed and engineered the breakthrough of breakthroughs, an ingenious, innovative technique for extracting electrical energy directly from the radical prototype nuclear fusion system he had engineered and successfully brought on line. The plethora of now-available energy, immediately quintupling, had begun to free humanity from all other power generation requirements. Lemmon’s revolutionary breakthrough had done away with the complicated, inefficient interposition of heat-exchangers, whereby fusion systems required circulating liquid metal to drive cumbersome, inefficient turbine generators. The Lemmon Process employed a complex “tokamak” shape — not really that, but the term became generic decades ago — within which a magnetically confined, superheated plasma composed of deuterium and an isotope, helium-three, fused and released the “strong force” that once bound the respective atomic nuclei together.

The second click was not only more subtle, but an order of magnitude more personal. Once Alexis had removed her bonnet, loosing a cascade of ash-blond hair to fall about her shoulders, her limpid blue eyes — really more an ethereal azure, like fine delftware — had set off buzzing sounds inside my head. Short in stature, and a bit on the slim side to be truthful, she was a living, breathing advertisement for the clear-skinned, washed out complexion that looks so wonderful on certain British women. Her clipped, melodious speech made her sound like the epitome of standoffish diffidence and correctness, but for some reason none of that mattered.

“I, uh . . . This is . . . a genuine pleasure, Dr. Lemmon,” I stumbled. “And, please call me, uh, Roger.”

“How very kind you are, Roger.” She held her frozen smile.

We stood there en tableau, me wondering what was wrong, she wondering why I was holding her hand hostage, when it dawned on me to let go. Jeff kidded me about that later, getting even for my crack about him bowing over her hand like some sword-waving dandy from the court of Louis the umpteenth.

Feeling even more loutish than usual, I listened to Alexis’ happy chatter, ears burning, while trailing the others into the cottage. She dispatched a servant to fetch tea — I hate tea! — and those blasted biscuits that go over so big in Merrie Olde each afternoon around four o’clock. I had no notion of the hour, local time, but no matter; we’d enjoyed a hearty meal several hours earlier.

Queen Anne would have loved the inside of that cottage. It was filled with decorously scattered ricky-ticky, curlicued what-nots, and furnishings of gleaming wood — real wood, mind you, not plastic doing a pretend. I won’t try to describe the furnishings except to say they warmly and humanly reflected the cottage’s mistress. In a far corner of the parlor, behind a rosewood baby grand piano, sat a spinning wheel of all things.

Inspired to make small talk during a lull in conversation, I asked Alexis if she ever used the spinning wheel.

“Why, as a matter of fact I do, Roger.” Sounding distantly amused, she said, “There’s a small flock of sheep over beyond the village, you see. A sewing circle of friends and I enjoy making use of the wool.”

“Oh,” I said brightly, outdoing my former dazzling example of lame repartee.

“Spinning can be quite relaxing, you know,” she added without being coaxed.

“I’m, uh . . . Yes, I’m sure it must, uh . . . can be.”

She waited politely, hoping to learn if any more sparkling dialogue would be forthcoming. Not wanting to ignore the Raja, she inquired what his first impression of Xanadu had been.

“Amazing!” he said without hesitation. “Where do they keep the stately pleasure dome?”

Alexis smiled. “I see you’re up on your Coleridge. Sorry, the nearest thing to a stately pleasure dome is a small inn at the village. Now and then rooms are reserved for special guests during weddings, funerals, occasions of that kind.”

Appearing to enjoy the tea and biscuits, Nobbotts endured the banter and idle chatter with serene detachment. Steve, the pilot serving as Paul’s Number One aboard ship, had vanished. A servant in a white jumpsuit came in to clear away the sterling silver tea service. After he left the parlor, Paul touched a napkin to his lips. Catching Alexis’ eye, he said in a casual voice, “We’re here to discuss a decidedly unusual situation. I’m afraid this isn’t a social call.”

“So I gathered.” Her brows contracted ever so slightly, Alexis said, “I’m absolutely delighted to see you all, but couldn’t the situation, however unusual, persevere until I go back to work? This is the first holiday I’ve managed in over almost two years.”

“No.” Paul’s reply was unequivocally negative.

The arbitrary response drew a sharp look from Alexis. “Mightn’t it be improper,” she asked, framing her words slowly, “to bore these gentlemen with our private affairs?”

“I’m afraid Roger and Jeff are directly concerned, Alexis.”

The gaze of those incredible, china-blue eyes locked with mine for an instant, then swung toward the Raja. Alexis will never outgrow wide-eyed, ingenuous look of childish innocence, a part of her heritage she can never erase. “Then I suppose,” she said, a note of resignation in her enunciation, “you’d best tell me about the . . . unusual situation.”

“Wiseest, I believe, for us to traipse downstairs,” suggested Paul. “Steve’s setting up the security screen.”

“If you wish.” Alexis Lemmon rose, her smile piquant, yet outwardly charming, as if Nobotts had asked her for the next dance. “Shall we, gentlemen . . . ?”

* * *

Alexis went to the bookcase, removed a large volume bound in cherry-colored leather, reached in to activate some hidden switch. A section of tiled floor dipped a few decimeters, and slid aside. She led the way down a too-narrow spiral stair, and the illusion of being in a Tudor cottage evaporated; harsh metal walls buttressed by slim stanchions forming the underpinnings of Xanadu framed a short corridor at the foot of the stairwell. We were ushered into a sparsely furnished office cluttered with what I assumed were microfilm reels, books and other archaic clutter that smacked of a compulsive hoarder’s secret treasure. In the corner was a slim, old-fashioned microfilm viewer console, while a computer terminal on the desk resembled an antique I’d once seen in a museum. Wall-to-ceiling bookcases sagged here and there under overflowing

papers, volumes and periodicals that had managed to remain in the present, mementos of some bygone era.

Paul nodded obliquely to Steve. The pilot rose and marched out of the “office” without a word or a backward glance. Nobotts closed and bolted the door behind him.

“I do hope you’ll overlook what a messy person I’ve become,” said Alexis on a note of apology sounding less than sincere. “This bric-a-brac belonged to my father, God rest him! A pack rat by nature, he was a first-class collector of uncollectible items, and simply could not bring himself to discard *anything*. What you see is a recreation of his lunar office precisely as it once was long ago in Sinus Iridum. I must confess that I rather like it this way.” She settled in the chair behind a battered sheet-metal desk.

Nobotts bent over the transit case. Steve had left it with the lid cocked open; an electrical cable snaked across the metal floor to an outlet on the near wall. After checking to assure himself the device was functioning, Paul straightened. “The room’s secure to practically everything from direct current to the low angstrom band. Begin when ready, Sir John.”

“Um, yes. Quite. Alexis, bear with me if you will, while I summarize to the best of my ability what Paul referred to as the, er . . . unusual situation.” Sir John took his time running through the events during Smith’s first appearance right after the *Love’s Labour’s Lost* virtual performance, recounting the odd encounter as we prepared to leave the holothheater. Far as I could tell, he left out no significant details.

“How very strange.” Alexis looked troubled, mildly distracted as if less than wholly absorbed in Mattingly’s tale. Her expression changed markedly, turning into abject disbelief when Sir John reported the Raja’s equally strange encounter of the second kind out in the observatory, which for some reason upped her interest by an order of magnitude. At that point Jeff added his two cents’ worth, relating how Smith had appeared from nowhere right at his elbow inside a workplace compartment with a closed hatch. He went on to describe the reed-thin, overly tall stranger’s pointed queries related to stellar physics, concluding with a droll account of the “stringbeanish fellow’s unaccountable disappearance.”

But it was my story that seemed to intrigue her the most. She studied me keenly across the desk, those sky-blue eyes clouded with a troubled squint that for some reason made her doubly attractive. She listened to me recount the encounter in Galileo, then leaned forward as if much more interested when I reinforced Sir John’s and Jeff’s mention of the urge to comply with Smith’s questions. I insisted that the exact same feeling had stolen over me, and like Jeff finished by reporting the stranger’s “impossible” disappearance. I went on to mention the subsequent search by the entire staff of the main observatory, the ancillary co-orbiting structures and the freefalling modules, recounted the subsequent derisive attitudes displayed by assorted teams of investigators, and finally tapered off and fell silent, my train of thought derailed in mid-sentence due to the fixed gaze of Alexis’ lustrous, semi-hypnotic blue eyes.

Nobbots uttered polite cough. “Roger omitted one extremely salient detail, Alexis. He neglected to repeat Smith’s most damning question, which is the reason we’re here.”

“Oh? And what might that be . . . ?” Alexis hesitated. “One moment, Roger.” She slid her arms forward on the desk. “You spoke of hearing Smith yourself, yet mentioned the recording disc containing only intermittent blanks when this Smith person questioned you?”

“Exactly. Not so much as a whisper, just dead silence.”

“Then are you’re suggesting . . . ?” She interrupted herself, and frowned. “The obvious implication is that this . . . Smith possesses some form of telepathic ability.”

I glanced at Sir John. “I realize how implying such an ability must strike you, Dr. Lemmon. But, that assumption was forced upon us by a lack of any other explanation.”

Alexis did not argue the point. She seems to accept at face value whatever anyone tells her, or so I believed during that first, traumatic meeting. Now I’ve learned better.

“Paul, I take it none of the investigators have turned up anything of a definitive nature.”

“Zero,” Nobotts told her. “Less than nothing, if that’s at all possible.”

“And your own private inquiries?”

“Zero, zero, and zero.”

“Were you thorough?”

His smile paper-thin, Nobotts said, “You wound me, Alexis. We were incredibly thorough, and totally discreet in making direct as well as roundabout inquiries.”

She relaxed in the chair, outwardly petulant as an apple-cheeked school mistress having difficulties with a rowdy pupil. “An extraterrestrial,” she murmured in a barely audible voice. “It’s an indecently preposterous conclusion impossible to posit realistically, which in itself is a severely understated way of defining a damned difficult theorem to swallow, though I must admit it sounds like the only rational explanation. Has anyone thought of another?”

“No,” I said, echoing a chorus of denials from everyone else.

Alexis tapped her fingernails on the desk in a slow drum roll as she revolved the far out notion of an alien visitation. “Then I suppose,” she said at last, “we shall have to live with that supposition until, or if, it proves false. Roger, getting back to what we were saying, what was it Smith asked you which has apparently upset Paul and John to the point of kidnapping you and Jeff, and rushing you out to Xanadu?”

I noticed Sir John cringe slightly as I framed a response. “Mr. Smith asked if I had any knowledge of a program aimed at developing a faster-than-light spacecraft vehicle.”

I thought Alexis might faint. One dainty hand flew to her throat, and the color drained from her cheeks, leaving a ghastly pallor.

All she did was indistinctly mutter, “Oh, my!”

Four - Sic Transit Gloria Nuclei

Being who she was, and especially what she was, Alexander Lemmon’s one and only offspring recovered quickly from the bombshell I had detonated — almost too quickly I recall thinking at the time. Alexis pursed her lips, and went back to drumming manicured fingernails on the desk. “In that case,” she said at last, “I expect we shall have to invent some method of coping with Mr. Smith, whatever or whoever he may represent, and from wherever in the universe he may have come. Although it sound silly, nevertheless I should like to hear conjecture if for no other reason than to air that point anyhow. I’ll record everything, and we’ll playback later if necessary to critique and analyze.” She stretched to activate the recorder, a genuine antique. “Now then, why would an entity bother to come from elsewhere and pester us with questions about a program

Nobotts leaned back, clasped his hands at the nape of his neck and stared at the ribbed metal ceiling. “At first glance, conjecture may sound like a valuable tool, Alexis, yet only if we are actively seeking an answer to . . . what?”

“Potentially, to three root questions, Paul. Who is the mysterious Mr. Smith? Why would he bother to come here and bother one professional astronomer after another with questions? And thirdly, roughly where he might be from?”

The Raja chortled. “Guess the origin of a suspected alien from *somewhere* in the rather large universe with nothing to go on other than his destination could lead to elliptical insanity.”

“We’re told,” countered Paul, “that outwardly he resembles an extremely tall human being, in short anthropocentric, and apparently comfortable in a room-temperature, nitrogen-oxygen environment. Doesn’t that point in the general direction of a warm-blooded, oxygen-breathing, possibly mammalian organism which evolved on some variety of earth-like planet?”

“A possibility,” said Das. “There’s absolutely no way to make any sort of educated guess, however, nor anything remotely akin to a meaningful guess.”

“Quite so,” put in Dr. Mattingly. “Yet one or two clues do exist, Jefferson. Telepathy aside, on three separate occasions the fellow had little difficulty passing himself off as a warm-blooded, intelligent being at home in a nitrogen-oxygen environment. Doesn’t that in turn imply a carbon-based life form that might share an origin similar to that of we humans? Secondly, one might infer that if he and his kind were not from somewhere hereabouts, in the Sol’s admittedly enormous general vicinity, how would Smith have been able to learn of us, our civilization? And more importantly, why would he be interested in learning if FTL spacecraft technology was under development here in our, uh, backwater corner of the galaxy?”

Das nodded. “Excellent point, Sir John. To carry your reasoning forward, might not the points made also mean he could be from one of the Goldilocks planets we know about, with a primary possibly resembling Rigil Kentaurus and Sol itself, perhaps even to a significant number of decimals. The major catch is that something on the order of one-point-seven million type ‘F,’ ‘K’ and ‘G’ main sequence stars occur within a thousand light-year spherical radius of Sol, and narrowing the window to a probable incidence of relatively nearby, earth-like planets potentially capable of harboring intelligent creatures somewhat like ourselves is, well, a fool’s game.”

Sir John endorsed the Raja’s estimate. “Well reasoned withal, Jefferson.”

“Understood,” said Nobotts, demonstrating a greater depth of astronomical knowledge than I’d assumed. “So shrink the envelope’s spherical bubble to, say, sixteen light-years.”

Jeff’s brow wrinkled. “As an arbitrary figure, sixteen lights is . . .” Pausing to ponder, he splaying the fingers of both hands, patted the tips together. “Correct me if you will, Sir John, but from memory going out sixteen circumambient lights leaves us with about fifty targets: four white dwarves, two ultra bright type ‘A’s, one brilliant yellow-white, two mild ‘G’s, seven small orange ‘K’s, and thirty-odd tiny, common-as-dust red ‘M’s. Both nearby ‘G’s we know exceptionally well. One is old Sol, and the other’s Rigil Kentaurus.”

Mattingly blinked and confirmed the Raja’s estimate. “Just so. Rigil has to be far and away the most promising candidate — a fine yellow ‘G’ with two of the system’s planets orbiting well within Rasool’s limits.”

“Not necessarily,” I pointed out, jumping into the discussion. “The ecosphere’s boundary parameters have to be tricky in a trinary system.”

Jeff's underlip curled. "True."

"One might even say positively," declared Sir John.

"What," inquired Nobotts, "are Rasool's limits?"

"The viable extremes," I explained, "of isolation or exposure to a given star's x-ray and ultraviolet flux, particulate bombardment by the primary's 'wind,' et cetera. Specifically, it has to do with the action of radiant energy on the ingredient constituents of seawater thought to generate oceanic amino acids, and eventually produce single-cell life forms which may or may not evolve into higher creatures. Rasool calculated nine-tenths of an astronomical unit would afford about one hundred and twenty-three percent of Earth's exposure level as the inner maximum, with the outer limit in the vicinity of Mars' median helion, one-point-six AU. It's a fairly narrow range."

"Roger's correct," said Das, his mind working overtime. "It's difficult for planets to assume stable orbits in a triple star system, and that alone makes an irregular ecosphere seem likely. On the other hand, the system's Beta component, an orange dwarf, circles the common center of mass about as far from Rigil as Neptune is from Sol, while 'C' — 'Proxima,' — is a teentsy red dwarf orbiting far, far out. In any event, if I were permitted a vote, I'd cast a ballot in favor of a nearby single as the more likely suspect. Barnard's Star, for example, a small "runaway" red dwarf on the order of six light-years distant, with high proper motion. It was targeted by century twenty-one's proposed Daedalus Project, mostly because we've known about the system's two Jupiter-sized gas giants for quite some time, as well as another pair of planets closer-in that regularly occulted the primary and afforded inferential mass and period data."

Sir John had listened closely to the discussion. After his repetitive throat-clearing preamble, he said, "I recall reading a summary of the British Interplanetary Society's proposed Barnard Probe," he said. "It came to naught for lack of interest and a staggering dearth of funding which causing our predecessors to settle solely on the Centaurus Probe." He repeated the staccato throat-clearing ritual. "I say, very little little will come of miring ourselves in guesswork. Why pursue a tangential discussion that simply cannot lead anywhere? Instead of chasing invisible rainbows, I should like to throw before you a somewhat fanciful scenario."

"Please do, John," urged Alexis.

"I put it to you," declared Mattingly, "that a postulated civilization somewhere within relative proximity to Sol has listened in on our radio frequency, microwave and lasercomm transmissions for two and more centuries, and probably dismissed them as the gabble of monkeys in a far-off zoo. After all, if they exist our own modern instrumentation should be able to readily intercept relatively weak signals throughout a fifty light-year spherical radius at minimum, and perhaps a good deal farther, before attenuation weakens them too excessively. After all, haven't we been radiating unspeakable hemorrhoid ointment and antacid commercials for most of that time? Today, our planet is exceedingly bright in the twenty to two-hundred-and-twenty megahertz range."

"Yet the SETI complex on Luna's farside," put in Alexis, sounding meditative, "has failed to detect the slightest smidgen of a modulated signal." Like Mattingly, she was referring to the fifteen-hundred-dish array of lunar radio telescopes inspired more than a century earlier by pioneers Drake, Sagan and their colleagues.

The Raja quipped, "Don't suppose Smith suffers from hemorrhoids."

Jeff's crack ignited more than one halfhearted chuckle, and eased the tension. Even Nobotts cracked a thin smile.

Sir John's guffaw made him seem merrier than anyone else. "Or a terminal siege of heartburn. Jefferson, there are times when I despair of you." He guffawed again, then his mien turned serious. "Yet were one to take another tack, isn't it conceivable that perhaps we've not been allowed to listen in on interstellar traffic, should any such exist? There are a number of ways it could be suppressed. At any rate, to complete my fanciful scenario," he added, "let us say when our probe achieved an actual fly-by of Rigil Kentaurus, retrofired and entered into the best relatively short cometary orbit our predecessors could manage, mightn't the rulers of postulated civilization X have taken notice of the feat, and asked themselves, what in the world is *this*? Are the monkeys attempting to break out of their cage?"

"It's another possibility," said Nobotts, making me think he believed none of it.

"In my summation," pursued Sir John, "a neighboring civilization may have posted Smith to do first-hand surveillance of the monkey cage in order to ascertain what they are liable to be faced with if and when we do get loose and begin pestering everyone."

"That last part intrigues me," I said, earning a glance of approval from Mattingly."

"Why do you say that?" asked Alexis.

"It suggests we *are* rattling our cage. For that matter, so did Mr. Smith's explicit question to me. Are we . . .?"

A thick, gravid silence descended in Alexander Lemmon's reconstructed office. Alexis stared down at the aged stacks of papers on her father's old desk, refusing to meet my inquiring gaze. When she did look up, it was to stare at Nobotts with an expression verging on despair.

Tactless always, the Raja said in an offhand manner, "Might as well fill us in on the big secret, Dr. Lemmon. Roger and I aren't naive. We've never discussed FTL openly, but have done as much or more speculating than anyone else, so . . ."

"Hold it!" Nobotts' deep voice cracked sternly. "John's convinced me both Shore and Das should be briefed, Alexis. It was our secondary purpose in bringing them here. They've been thoroughly checked out, then double-checked in a deep background investigation conducted by senior people under my direction. John strongly vouches for them."

Alexis rose slowly, hands flat-pressed on the desk. Obviously struggling with the decision, she said in a brittle voice, "Roger, would you and Jeff do me a kindness and step out into the corridor for a moment. I wish to discuss something with John and Paul in private."

When she finally did look at me, frost had hardened those delft-blue eyes in a way I found uncompromising, and to be truthful a touch scary.

It was my first clue that falling in love can leave you severely injured by the fall.

* * *

Excluded from what by all indications was the start of a knockdown, drag-out verbal donnybrook, the Raja and I moped in the corridor for five or ten minutes. Tired of standing there feeling slightly foolish, we traipsed up the spiral stair and found Steve watching holovision in Alexis' study, his grunt of greeting when we appeared none too cordial.

Lolling there at loose ends, stimulated in one way by being cast as the central figures in what had promised to be a melodramatic confrontation down below, yet also disappointed at being told in no uncertain terms to get out and stay out, I tried to watch the holovision show that

had captured Steve's attention, some kind of musical revue featuring a bevy of chorus gals costumed in colorful body paint, makeup, and nothing else.

Steve's tongue was literally hanging out. Pilots — technically astrogators in the literature of their Guild — head the list of spacemen who have only two topics of conversation: sex and spacecraft, not necessarily in that order. "Pipe the prize heifer second from left." Steve pointed with the toe of one Velcro-shod microgravity boot, and went on to deliver a monosyllabic spiel centered on the virtues of sex under microgravity, denigrating lovemaking ground-pounder style as hardly worth the effort — too many sags, sore knees and elbows. His lecture might have been monosyllabic, but it was enlightening.

Thirty minutes ticked away, one deliberate tick at a time. Das corked off — the usual effect of holovision on a first-class scientific mind. I was feeling groggy myself; it was the middle of our "night," and throughout most of the elapsed "day" I'd toiled in the observatory.

Next thing I knew, Steve was rocking my shoulder. "Up 'n at 'em, you two! They want you in the basement."

The Raja yawned and followed me back downstairs into the littered, security-screened office. Not bothering to acknowledge our reappearance, Alexis continued a quiet conversation with Sir John and Paul, both of whom looked weary but otherwise unaffected by whatever had transpired during our absence.

Paul nodded, and rose. "Alexis has agreed to brief you. Read these documents carefully," he instructed, handing each of us a single sheet of watermarked stationery. "Sign them if you concur with the statements, give them back to me if you don't."

"Brief us on what?" the Raja wanted to know.

"Read!"

I scanned the single paragraph:

PROJECT DEMETER

Being totally free of coercion, and holding no reservations of any kind whatsoever, I hereby swear in the Name of Everything I hold most sacred to divulge absolutely no informations about this project about to be revealed to me, nor any portions thereof, and moreover swear to divulge no details I may later learn to any agency, individual, or representative of such under pain of fine and imprisonment, since all such informations, including the name by which this project is known, shall now and in the future be classified MOST SECRET.

I signed without the benefit of a dotted line, gave back the form. "That's it . . . ?"

Paul did not reply. Accepting Jeff's copy, he noted our signatures, initialed and dated both forms, laid them on desk and chose a seat on the scarred leather divan beside Sir John.

Alexis wasted few words. "It's late, and we're all tired. I've given this same lecture dozens of times, and it never fails to earn many questions. I shall be happy to answer some queries tonight; the rest will have to wait until a more appropriate opportunity presents itself.

"Let me emphasize something now, at the beginning. Being my father's daughter, I like to think I've inherited his vigor, resourcefulness and drive, but unfortunately not his genius. The technical brain trust of Demeter is a theoretical physicist, Dr. Kenneth Clarke 'Casey' Chew, a gentleman who in my estimation has earned his credentials ten times over. I consider him beyond doubt the most astute, most innovative scientist of this or any other modern era. I act as the self-

elected godmother of Demeter, keep myself busy as the mother hen who dashes about and desperately tries to pull all the elements and stray bits and pieces together.”

She paused to marshal her thoughts. “Now then, a few sketches of historical perspective is not simply necessary, but imperative . . .”

Alexis described how her father, Alexander Lemmon, had begun his spectacular career as an associate physicist under the guidance of fun-loving, capable Fritz “Putzi” Bauer. Working in the MIT laboratory situated in sublevel Sinus Iridum, the lunar city carved beneath the Jura Mountains overlooking the Bay of Rainbows, he had inspired envy among his peers as a junior member of the research team doing work on the mechanics of hadrons, elusive particles subjected to the “strong force” binding atomic nuclei together. (Nuclear physics isn’t exactly my bag. Her lecture cleared up a number of things about which I’d known relatively little, including the study of baryons, which with mesons constitute the two major subdivisions of hadrons).

Waxing descriptive, perhaps even poetic, she explained the atomic nucleus as having no similarity to the static, stationary object pictured by the general public, instead consisting of a seething cauldron of constant, evanescent change, where extremely short-lived particles and antiparticles were converted into forms of pure energy, reconverted back into particles, many existing for fleet billionths of a second, and then reconverted into quanta of energy, only to reappear yet again as hadrons, or “resonances” as the heavier, long-lived particles were known.

During her father’s journeyman tenure at the MIT facility, the only practical tools available for phenomenological research into “scattering amplitudes” — predicating the results of particle collisions within the constraints of Heisenberg’s uncertainty principle — remained Einstein’s classic laws of General Relativity and Planck’s Quantum Mechanics, though numerous other theories abounded. One such, the Dual Resonance Theory, had been laying about in discard since mid-century-twenty-one. Lemmon had seized on the concept, and made it his own.

The exacting, complex formulations required to construct a valid mathematical model of a dual resonance hadron insisted that it assume the topology of a massless, one-dimensional “string,” the ends of which oscillated at or near the speed of light in multidimensional spacetime, not the spinning, three-dimensional particle described by normal field-quantum physics. It soon became apparent to her father that allied with Dual Resonance was the Quark mathematical model, which required that hadrons fell into different families whose members were alike except for certain obscure “quantum property” values produced by following subtle rules that derived from “building blocks” — quarks and antiquarks — bound to hadrons via Quark Confinement, through the actions of particles known as gluons, and therefore not freely releasable under any circumstances, although as Demeter’s guiding light Dr. Chew believed them associated with photon propagation, another ball game altogether.

Thus the complete hadron model theorized by Lemmon’s Dual Resonance interpretation consisted of one-dimensional filaments with zero intrinsic mass, upon which were strung beadlike quarks and antiquarks — motes of pure, inseparable energy oscillating at or very close to the velocity of light in a universe which, to satisfy mathematical rigor of statement, demanded a minimum of twenty-five dimensions. (Here, I readily admit, Alexis lost me).

Breaking off the lesson, she announced that everything she’d told till then had amounted to a grossly simplistic overview, with so many missing details that it made her summary no more than partially accurate, yet nevertheless functioned as a prelude to what she intended to relate.

That said, she explained that while drinking beer, arguing and pontificating one evening in Putzi Bauer's sublunar residence, Alexander Lemmon and his superior had become engaged in a spirited debate of the pros and cons pertaining to various aspects of Dual Resonance. The hour grew late, and the whiteboard in Bauer's study became gravid with haphazardly scrawled symbolic logic. Mrs. Bauer, long-accustomed to the feverish antics of her brainy husband and his incomprehensible associates, said goodnight and went off to bed.

Sometime during the wee hours Lemmon happened to speculate about the potential consequences of aligning the googols of nucleonic hadrons — each and every oscillating, quark-laden “light string” within a specific physical object — in precisely the same hypothetical plane. That was all it amounted to, a random “crazy” notion and nothing more.

After Putzi Bauer yawned for the last time and asked to be excused, Lemmon stayed in the study long enough to transcribe the whiteboard scratchings into his notebook, then later he inputted the raw, unorganized material in his computer's database. Lemmon went on to become the Moses of nuclear fusion power generation systems, but what he had failed to do was pursue the stray concept that had occurred to him after hours in the anthill carved beneath the lunar mountains abutting the Bay of Rainbows.

Alexis told us that while going through her father's effects not long after his passing she happened to run across the puzzling notebook entry, and had gone back to reread it again. She had become intrigued by it, and eventually showed the carelessly scratched page of esoteric symbology to a colleague, Chinese physicist “Casey” Chew. A recently converted disciple of Dual Resonance, Chew had taken the ball, studied it, bounced the logic of it around in his head for quite some time, and decided to run with it, see where the odd theory would take him. Less than a year later he presented Alexis with a copy of the paper he intended to submit for publication in a prestigious North American scientific journal.

After reviewing Chew's puzzling tract, actually going through it three or four times and making copious notes, the paper entitled “A Practical Application of Dual Resonance Hadron Alignment to Spacecraft Propulsion Systems” electrified her to the point of falling deeply in love with Chew's potential method of opening humanity's horizons to the encompass the surrounding universe. Rushing to congratulate Casey, she was horrified when told that he had already e-mailed the manuscript to a prospective publisher in Greater New York.

With Chew's tract lost beyond retrieval in cyberspace, the pair of them had waited anxiously, biting their fingernails as the weeks dragged past. During the interim, Alexis enumerated and cataloged the manifold political, social and cultural negative ramifications pertaining to Casey's brainchild, in which she'd been unable to find any unpluggable loopholes.

Having given no thought to anything other than the technical aspects of his innovative paper Dr. Chew was contrite. They had waited for another anguished week, hoping for the best, anticipating the worst. Apparently the journal's senior editor had foundered before reaching the second page of Chew's manuscript. Dismayed by the sea of abstruse symbology making up a major portion of the paper's context, he had rejected the manuscript, returning it electronically attached to a polite cover letter explaining how, while truly fascinating, he judged the material in its present form far too radical and complex for even the most astute member of his professional scientific readership.

Celebrating joyfully, they had locked the manuscript in Alexis' safe, and Dr. Chew had put his mind to work solving the staggering engineering problems attendant upon the design, development and fabrication of a laboratory proof model.

Science, per se, had been defined millennia ago by the canny, pragmatic Romans in one simple Latin phrase: *quod erat demonstrandum*. QED, "that which may be proven." It is all the definition there is, or need be. But two methods of effecting a satisfactory demonstration are accepted in scientific circles: the empirical, or theoretical. The theoretical solution to faster-than-light spacecraft propulsion systems as propounded by Dr. Chew would have satisfied any competent, fair-minded physical scientist like Alexis, or at least any able to follow his cascades of intermeshed symbolic logic to the startling conclusion, and thus arrive with him at the sunburst revelation of his central concept. Unfortunately, it was mutually decided that few such individuals possessing sufficient scientific insight could also be trusted to remain silent.

Partly for secrecy's sake, partly to ease the burden imposed by working together at all hours on the prototype engineering model, Alexis urged Dr. Chew to move into her Sinus Iridum home adjacent to Lemmon's mothballed private laboratory. She described the wonderful working relationship they had enjoyed in the beginning. After opening and re-stocking the lab, their labors had gone better than well until Casey made a sudden decision to run off and get married.

Alexis emphasized how insistently she had pleaded with Chew, trying with every wile and means at her disposal to dissuade him, begging Casey to wait until the completion of primary testing, then less than a year in the future. But he had refused to listen, or budge; she didn't hesitate to intimate that among Chew's otherwise innocuous traits was mulish stubbornness. Leaving her to work alone for months, he had returned to the Bay of Rainbows with a slight, raven-haired Chinese bride he'd dubbed with the Western name, Laura.

Her recital of the final, frantic months was nothing short of hilarious. She and Dr. Chew, laboring around the clock twenty-four-seven to resolve the tantalizing uncertainty of whether or not the device would function, found themselves trapped in a *ménage à trois* household, its unsettling ingredient a then-pregnant Chinese woman who understood not a syllable of English. Having convinced herself that Alexis and Chew were not devoting strict attention to their work one hundred percent of the time, Laura Chew turned monomaniacally jealous, and had constantly spied on their activities, driving Alexis into fits and sulks and outraged denials, none of which Mrs. Chew comprehended either figuratively or literally.

Significant events now and then come in pairs. It so happened that Laura Chew bore a baby boy on the same day the proofing device was slated for pristine testing. Greatly distracted, Casey rushed his wife, already in labor, to the Sinus Iridum Medcenter, then paced the corridor outside the delivery room with more anxiety than is normally allotted to fathers-to-be. He briefly looked in on his wife and newborn infant, then raced home to Alexis and the device.

Titanic power from Lemmon's prototype fusion tokamak was made available via solid silver bus bars bathed in cryogenic dry nitrogen. Two fastax cameras were spun up to an ungodly number of thousands of frames per second, and other, more sophisticated instrumentation, calibrated the previous day with religious zeal, was activated. Her eyes bright with anticipation, Chew's brow beaded with perspiration, Alexis watched him ease power to the device.

The target object, a one-hundred-millimeter-square cube of pure titanium faded, flickered, and vanished.

Alexis retold what had taken place on that storied day, how they had danced about the lab in a wild frenzy, jumping up and down on one another's feet, loosing earsplitting yells of triumph. The following morning, before Casey returned to the hospital to visit his expanded family, the sleepless, elated pair took turns gloating over the developed film, the incredibly significant brush recorder squiggles and computer readouts that, when deciphered, proved beyond any shade of doubt that success was theirs.

QED. An entire cube of chemically pure titanium, the oscillating "light string" hadrons forming its countless atomic nuclei having been polarized in an unknown but theoretically calculable plane, had briefly shifted into its natural environment, the n-dimensional spacetime continuum.

The Einsteinian constant *c*, the velocity of light in vacuum — basic middle 'C' around which the great tonic chord of Relativity had been struck — could never be outshouted.

But might'nt a more complex tune with very subtle lyrics be sung?

Five - Demeter

Alexis stifled a yawn with the back of one dainty hand. "Your pardon. I imagine by now you've thought of a thousand questions."

The Raja had been on the edge of his chair, listening closely. Forever impetuous, he did not to disappoint Alexis. "Naturally you built a test vehicle, of course."

"Yes, two, in fact. We desperately needed a flight model with which to arm ourselves during a prospective quest for investment capital to carry on, and thought we had it in Alpha Drone. But as a test bed Alpha proved too small — tiny, to be truthful, since it forced ultimate miniaturization of an oxy-hydrogen fuel cell that had to perform in continuous overload. Even the brief duration of a trial flight proved too much for it.

"However," she added, "Alpha succeeded in transitioning and accomplishing brief, internally programmed acceleration before it decelerate and retransitioned by default into relativistic spacetime. Hadron alignment, you see, demands continuous power output. Should it be interrupted for any reason an instantaneous return to pragmatic spacetime is automatic. After a merry chase, we located the tiny bird by chasing down its weak, fifty-watt transponder signal and recovered it in the vicinity of Saturn's orbit. If not for Casey's hair-raising calculations, plus a very weak transponder signal, we would never have found it and recovered the data. During a subsequent trial flight the original test bed exploded."

I sat bolt upright, a catch in my throat. "Excuse me, but you said 'brief' acceleration boosted your drone from cislunar space to the vicinity of Saturn's orbit?"

Her tired smile politely acknowledged the fact that I'd been paying attention. "The transit seems to've capture your attention, Roger. N-space acceleration is entirely subjective, you see; Newtonian laws simply do not apply. Casey used an idle moment to generate some frightfully complex partial differential equations aimed at objectively defining approximate equivalencies between ordinary and n-space velocities and flight durations — derivatives of time dilation, relative density of the medium, n-thrust versus a radical revision in vehicle mass ratio, and so forth, characteristics which undergo significant changes. Having nothing else to work with, we

found it abysmally difficult, if not impossible, to establish a relationship between n-space FTL and flight in the normal spacetime continuum.”

Her statements sent me overboard into a deep sea of wonderment. “Dr. Lemmon, isn’t there least some, er . . . rough estimate of the, uh, test bed’s velocity?”

This time her smile again illustrated how tired she was, but was also pixyish. “Velocity in relation to what, Roger? Forgive me for replying with a baldly unfair, rather rude question. At times I’ve been accused of turning into a dreadful tease.”

I returned the smile. “You are hereby forgiven.”

“Objectively,” she pursued, while awarding me a funny look, “n-space velocities are in a sense analogous to multiples of cee, just as particle spin-values forever relate to Planck’s Constant. Casey estimates a one-way time-of-passage to the Alpha Centauri system at between ten and eleven subjective weeks, that long only because of the acceleration-deceleration time in the normal continuum which will be mandatory at either end of an interstellar transit to the Centaurus System. If that makes any sense at all, though I doubt if it will, Rigil Kentaurus and its stellar companion are too close.”

“Too *close* . . . !” The Raja stared at our hostess in wide-eyed wonderment.

“Whoo-boy!” I clapped my hands. “Too close in this case is exactly the proper distance. How about the other test model you mentioned, Dr. Lemmon?”

“Beta Drone ended up as a modest success,” she told us, accompanying the statement with a faint moue of dissatisfaction. “And please address me as Alexis. Our decent sized test bed, Beta, was powered by a miniature ‘snap-type’ thorium reactor. Carried aboard were white mice, a young sow, and a pair of gibbons, proof-positive tests providing hopefully valid data on the null effect of n-space on living tissue, and eliminated most of our worries when the animals came through alive and well. Someday, if and when our program ever goes public, the animals shall no doubt become famous as the first earthly creatures ever to leave the solar system, and return.”

Jeff muttered something indistinguishable in what was probably Bengali. Though totally enthralled by what he’d been hearing, I refuse to anything up and including word of the Second Coming could inhibit the Raja’s thought processes. “You say Beta was fission-powered, Alexis. Does that mean you have no empirical data on fusion operation in n-space?”

“Not yet, I’m afraid not.” she said. “Casey put a variety of radioactive samples aboard Beta during the second test. He’s convinced post-flight analyses guarantee normal n-space fusion performance.

“Incidentally,” she said, interrupting herself, “we demonstrated Beta a third time before two chiefs of state and a half-dozen other high-echelon national officials. They were impressed beyond words, and in fact acted a great deal more than simply impressed. Devastated might be a more appropriate term. I’m delighted to tell you immediately thereafter Demeter received bona fide commitments for more capital than could possibly be spent on a Demeter prototype and first flight, every centime it goes without saying disbursed hush-hush, and under the rose.”

Jeff grinned, a wicked glint in his dark eyes. “Judging by the most prevalent accent in the room, it’s not difficult to guess the identity of one benefactor nations Paul mentioned.”

Sir John loosed a hearty guffaw; his long silence had led me to believe he was dozing. “Jefferson, this time you’ve put your foot in it clear to the hip joint. Good Lord! The United

Kingdom can barely keep itself alive nowadays, let alone pour billions of pounds into interstellar projects. But let's forgo your roundabout way of playing the Twenty Questions game, eh?"

"Why?" I heard myself ask.

Alexis looked at me askance. "Pardon me, Roger?"

"Why," I repeated. "all the super-secrecy? You and Dr. Chew have conceived and implemented the most important contribution to humanity since our remote ancestors collared fire. Opening up the universe, with a first goal of reaching crossing a four light-year gulf to the Alpha Centauri System in eleven weeks is . . . I understand what you've told us intellectually, but not by any means emotionally; that could take a while. What I can't fathom is why you're so bent on hiding the blinding light you've switched on under a thick basket."

After a second or two spent in thought, Alexis said, "I believe Paul can best answer that."

Nobotts regarded me sternly. "Unless I'm mistaken, Shore, you and Das each earned your doctorates eight or so years ago, and since then have spent an appreciable portion of your working lives in space. Don't hesitate to tell me if I'm wrong, but I pride myself on achieving an understanding the scientific mind sufficient to guess that neither of you know, or for that matter care, about earthly politics."

I admitted that politics did not number among my favorite pastimes.

Jeff merely shrugged. "Tracking political machinations is a time and energy waster."

Although very thin, Paul's smile was charitable. "Now, why doesn't it surprise me to hear that? You two amply illustrate a lack of interest in the current global situation. Briefly, I feel very privileged to be acquainted with a learned academic who compares today's geopolitical situation to that of fifth-century Europe, when an older, more dynamic and 'enlightened' culture attempted to stave off the inroads of aggressive, Johnny-come-lately barbarian hordes who were clamoring at the gates. In the present instance, were that analogy to be carried forward, let us say the barbarians are represented by the disenfranchised Third and Fourth Worlds, or what many term the submerged two or three-fifths of humanity who eke out a bare-bones existence, if that.

"Should the Third and Fourth World leaderships," he continued, "or the revolutionaries, terrorists and other abounding radical elements discover that vast sums are about to be 'sewered' in what they would doubtless regard as a pipe dream like Demeter, it would arm them with incendiary ammunition the least spark could ignite. Many Have-nots living beyond the edges of civilization would contend that 'throwing away' enormous sums on interstellar fairy tales serves only to flaunt the hoarded overabundance of the Haves. My acquaintance, who is one of very, *very* few outsiders privy to Demeter, argues convincingly that secrecy is tremendously more important to Demeter than the program's eventual success, a view frankly not shared by I myself or the chiefs of state who have voluntarily become our benefactors.

"Yet the gentleman in question," insisted Nobotts, "owns impeccable credentials which tend to make his conclusion indelibly credible to our thoughtful investors. While not a practicing politician, he is considered a superbly astute geopolitical philosopher, an 'egghead' whose counsel it might well be fatal to ignore. He has repeatedly assured us and our sponsors that should news of Demeter leak it would catalyze every disputatious Have-not faction in existence to the point of perhaps igniting the long-dreaded war between themselves and the Haves. He feels that sheer numbers on the side of the Have-nots — the 'barbarians' to pursue my feeble

analogy — might overcome all of the sophisticated thermonuclear and other modern weaponry in the Haves' arsenals to the point of conceivably precipitating the downfall of civilization.”

The Raja's objection was heated and immediate. “Mr. Nobotts, despite your ‘superbly astute’ geopolitical philosopher’s fear, I fail to see how successfully opening a road to the stars would do other than benefit the world’s underprivileged peoples. I’m absolutely certain, for example, that India would be thankful for even a slim hope of distant worlds to colonize. I really can’t imagine any other type of reaction.”

“Nor I, Jeff.” Paul’s eyes were hooded. “As the world’s most populous democracy, however, India does not fit the template that terrifies my . . . superbly astute acquaintance. Nor can you assume that every one of the Have-nots in a leadership position altruistically seeks betterment for his or her constituents — a virtuous outlook he considers doubtful.”

The Raja subsided, his standard method of silently conceding a point, but it was easy to see his heart wasn’t in making the concession.

Paul went on to explain that ever since the Third Industrial Revolution in which Alexis’s father had played an enormous role, patience had been urged upon the Have-nots. “Give us time, we pleaded, and the virtually limitless fusion energy source will make you all Haves just like the rest of us. Regrettably, patience is a luxury the Have-nots find in short supply. We Haves, you see, live with an entirely different set of expectations and ambitions than the downtrodden billions in portions of Latin America, Asia, Africa, the Near East and Pacifica. Pitiful souls in the squalor of Mumbai, for example, still claim hereditary squatters’ rights to a few centimeters of sidewalk as a nightly sleeping place. But I’m sure you know conditions there better than I, Jeff.”

Nobotts explained how certain Arab and Muslim states, once able to exact ransom-like prices for the world’s dwindling supply of fossil fuel, bore a burning, unquenchable hatred for the West, not to mention a deep, abiding resentment of the Third Industrial Revolution largely sponsored by the West and the advent of nuclear fusion power generation, which encouraged the “theft” of petroleum riches and aided in driving their respective economies into the ditch. Third- and Fourth-Worlders had been informed time and again how less solvent nations would be able to obtain all the raw materials they needed via fusion power, its sole byproduct pure, potable water, also enabling them to cleanly breakdown trash and waste into their constituents in order to perhaps someday reconstitute useful articles and commodities. The disenfranchised and their kin had been told they would eventually be able to afford homes with three bedrooms and two baths, public fusion-powered transportation systems, and the other appurtenances of Nirvana.

“Dangling those and similar plums before their noses,” Paul concluded, “was a waste of time. Like *Oliver Twist*, the Have-nots have consistently demanded more, and want it now, not in the sweet bye and bye, mainly because they have been subjected to hard-sell propaganda by irresponsible leaders bent upon preaching terror tactics and militant revolution as the only means of getting what was wanted.”

* * *

Paul’s lecture ended on a sobering note. Sir John had dozed off, and only a muted whisper from the air conditioning louvers broke the stillness.

“So you see,” declared Alexis, “we are in a race against unknown odds, with an entry deemed vital to go forward in absolute and total secrecy.” She tried unsuccessfully to stifle a yawn. “Forgive me! The night is nearly gone, and I can barely hold my eyes open. Shall we troop

upstairs and get some rest? There are spare bedrooms. Roger, would you and Jeff mind doubling up?"

I rose stiffly, suddenly heavy-lidded myself. But the Raja is, was, and shall forever be irrepressible. He collared Nobotts in the act of switching off the security screen, and hurled a sly barb: "You promised to have us home in time for breakfast."

It was like the result of flipping a switch, turning Paul's manner from cool and self-contained to frosty. "So I would have," he said slowly, "if Alexis had not agreed to brief you. Shall I call Steve, have him run you and Roger back to Earth-Luna? I warn you, doing so may jeopardize your futures in the program. Besides, I would have to wake him, and Steve is . . . Well, to put it bluntly he owns an extremely short temper, which is a major understatement."

Having revived, Sir John noted the Raja's crestfallen expression. He reached out and clapped Jeff's shoulder with paternal affection. "Same old Jefferson, eh?"

Quailing a tad under Nobotts' icy gaze, the Raja said, "Are you telling us . . . ? Do you mean Roger and I are slated to work directly on the, uh . . . program?"

"Absolutely. Why else do you suppose you were briefed? Oh, there's this peculiar Smith business, but we could have easily filled in Alexis, then whisked you home none the wiser."

Jeff lapsed into a subdued, introspective state. "After what tonight's lesson," he said wistfully, "I would rather work on Demeter than anything else in the entire universe. Where is it taking place?"

"All in good time," said Nobotts, putting a finger to his lips. "The security screen's off, and you came close to uttering a bad word. Let's call it a night, get up to bed."

Though less than contrite, Das did not reply.

Alexis showed the Raja and me into a small, overdecorated bedroom with twin beds done up in tooty-fruity flounces, ruffles and chintz. I visited the loo, undressed and lay abed with the Demeter revelation whirling and gyrating and doing loop-the-loops in my head. Weary as I was, my sleep center refused to turn off. I couldn't seem to rein in the playback mechanism inside my skull that every few seconds shrieked "Alpha Centauri in eleven weeks!"

Overcome by an urge to leap out of bed, rush to the vidicom terminal in Dr. Lemmon's study and call an inspired, and inspiring, professor at UCLA to whom I owed very much indeed. I desperately wanted to tell him about Demeter, and knowing it impossible angered me, helping helped to ensure my wide-awake state.

The notion of starflight is heady wine. I'd just lived through the most intellectually stimulating day I ever spent, or hoped to spend, and tried to will myself to sleep. But the surges of excitement refused to go away, or so much as diminish. After another timeless interlude spent staring into the darkness, I got up stealthily so as not to disturb the Raja, tiptoed to the window and pulled aside the chintz curtains.

The artificial "suns" across the kilometers-wide gulf separating Alexis' neighborhood from the curved sector in the opposite periphery had been turned low for the arbitrary ten-hour "night." Casting Xanadu's dished countryside in a dim umber glow, the trees and low hills I was able to make out were etched in dull coppertone radiance, with great masses of shadow everywhere. The scene resembled one of the chiaroscuro landscapes painted by the elder Pieter Bruegel.

I crept back to bed, choking on the wonder of it all, where I tossed and turned for another eternity and a half.

Suddenly a hoarse voice from the darkness spoke up. "Demeter!"

"Knock it off!" I said softly. "Want Nobotts to lock you up for breaking security?"

"Demeter," he repeated in a stage-whisper. "I just figured it out."

It was a news item that shut me up for a few heartbeats while I tried to decide whether he was putting me on, or being cute for the sake of cuteness. "So tell me what," I whispered, "the program's name has to do with the price of oranges?"

"Quite a lot, Rog."

"Demeter," I whispered. "Silly Greek goddess of crops and such, wasn't she?"

"That she was," came his whispered response. "But would that name be apropos of our, eh . . ? Of the project?"

"Not so far as I can see, No."

"Think about it," he teased.

"It's later than late, and I'm too damn tired to think. Shut up now, and get some rest."

"Are you aware," he whispered, "of the Latin name for Demeter?"

"Who gives a hoot? Ceres, isn't it?"

A snide, soft snicker issued from the other twin bed. "Right on, esteemed colleague of mine. And what might Ceres be, or where?"

I lurched upright in bed. "The *asteroid* . . ?"

"Jackpot!"

It started another set of wheels turning in my head. Neither Jeff or I got much more than an hour of sleep during what remained of that magic "night" in Xanadu.

Six - Freefall Squash

Thirteen hours later we dropped off Sir John at Earth-Luna. As Galileo's director, no way could he afford to steal away and accompany the team to Ceres, though I'm sure staying "home" was something he deeply regretted. Before disembarking in E-L's nadir berthing stack, he lectured me and the Raja, giving us detailed instructions about the work Dr. Chew would expect us to perform upon arrival in the asteroid belt. Apparently he himself had been discreetly lending a hand at long range with astrogational calculations pertaining to the pristine interstellar flight, something he assured us was neither practical, nor marginally desirable from a program security standpoint. Later we learned that for months prior to the appearances of otherworldly Mr. Smith Mattingly had been pitching for one or both of us to be brought into Demeter and put to work.

During our brief stopover at E-L, Das and I barely had time to scratch. Paul's ship stayed docked just long enough for us to dash inboard, pack clothing and personal effects, and make a few calls to close out our affairs. I mentioned a need to cancel the lease on my E-L bachelor's quarters, but Nobotts said it had already been taken care of. Like God, Paul seems to move in mysterious ways, yet produces more immediately tangible results.

I was reluctant to buzz off and abandon bushels of unfinished work at the observatory, especially when given no chance to say goodbye to various cronies in Galileo or Earth-Luna. Sir John also informed us a pair of suitable cover stories had been concocted. Das would be

advertised on his way down to New York in order to attend a Cornell University stellar physics seminar, and the allegedly off on a lecture tour centered about the ultimate revised edition of data returned from the Centaurus Probe. As for myself, my doppelgänger was slated to go groundside aboard the same shuttle as the Raja, but for a different reason: a leave of absence due to the death of my grandmother in Greater Los Angeles. An orphan who knew neither parent, losing a hypothetical grandmother hit me particularly hard.

In a hurry-up mode, Paul's ship took aboard stores, electronic spares, and an assortment of machined parts Dr. Chew had ordered fabricated in E-L specialty shops, plus sealed lithium slugs from which to extract tritium for the ship's fusion torch. Paul's vessel was apparently nameless, nor so far as I could tell did it have a U.N. Spacecraft alphanumeric designation. I remember asking Nobotts if we were going to pick up Alexis at Xanadu.

Busy as a cat with two tails on the eve of departure, he answered curtly. "Dr. Lemmon is already aboard."

Several optimum windows exist for vectoring from the Earth-Luna System to the orbital locus of the minor planets, but modern, fusion-powered spacecraft care little about economy when trajectoring to a destinations closer than Jupiter's numerous moons, and then only if said destination is currently on the Sun's near side, or quartering, while the few remaining chemical-fueled ships in long-haul service are forced to stick to ballistic trajectories. A fictitious flight plan had been filed in E-L Traffic Control. With all in readiness, and everything taken aboard stowed securely for deep space transit, a telescoping pneumatic ram backed the huge "yacht" away from its berth in the nadir docking stack, and disconnected. Accompanied by neither hoopla nor fanfare, Steve turned ship and boosted gently away from E-L, once clear a certain distance turned ship again to perform our first course maneuver, and shaped trajectory for the asteroid belt.

A contemporary of sixteenth-century astronomer and mathematician Johannes Kepler, Titius of Wittenberg, was first to advance the theory of proportional planetary orbit spacing. No one paid much attention to his theory until the late eighteenth century, when astronomer Johann Bode restated and refined the rule-of-thumb estimates Titius had originated. Viewed in the broader, all-encompassing perspective of modern astronomy, the Titius-Bode Law holds up poorly, but for a long period planetary distances from the Sun were construed as functions of relative densities within the solar nebula from which the material eventually making up the various bodies had accreted and literally gravitated into planets. The old-timers had oodles of fun squabbling over Bode's Law as it became known, particularly the "unseemly" disputatious gap between the orbits of Mars and Jupiter, and it raised a dither centered about this inconsistency.

Extrapolating Titius-Bode's formula outward from the inner planets confirmed the mean solar radius of Jupiter's orbit at just over eight hundred million kilometers, while Saturn swung around the Sun at roughly one billion, six. Accordingly, in consideration of the aforesaid proportionality, a planet surely had to orbit at roughly three billion, two. Astronomer Royal Sir William Herschel solved this dilemma by discovering Uranus a good deal farther out, but the absence of a world between the orbits of Mars and Jupiter, where by all rights a planet should occur per the Titius-Bode formula made for an infernal inconsistency.

Giuseppe Piazzi, a monk acting as director of the Palermo Observatory, presumably had nothing better to do on the first night of the nineteenth century, and happened to be searching a

region within the loosely defined bounds of the constellation Taurus when he spotted a very dim “star” doing funny things. One of the funny things it did was to move against the background of so-called fixed stars, and an even funnier thing was that it moved *backward*, in an unheard of retrograde direction totally inconsistent with all other solar planets. After numerous intense calculations, not to mention the intervention and assistance of the era’s “big name” astronomers, the newly-discovered planetoid was named Ceres. Later, Friar Giuseppe was honored by having a smaller chunk of asteroidal debris named after himself: Piazzia.

Seven hundred and eighty kilometers in greatest diameter, Ceres orbits in company with a sky-borne junk pile made up of large and small flotsam and jetsam. Bodies in the orbiting swarm of asteroids range from very large planetoids similar to Ceres, Pallas and Vesta, to lesser mountain-sized objects, to masses the size of hills, boulders, pebbles, sand, and dust, all pursuing eccentric orbits about Sol in a plane sharply inclined to the the Ecliptic.

The trajectory computed for Paul’s fusion-powered “yacht” was designed to swing us outward and “above” the plane of the Ecliptic, going uphill all the way against the pull of Sol’s massive gravitational attraction in a gentle curve nearly five hundred million kilometers in length, and allow us to intercept Ceres sixty-three shipboard “days” after departure, which meant two weeks under acceleration with the fusion-powered torch doing a constant burn, one-full-month-plus in freefall, and a final two weeks of powered deceleration.

One evening while still under departure acceleration boost, Alexis explained over dinner why, despite the inconvenience of obtaining supplies and a two-month transits, distant Ceres had been selected as an ideal site for Demeter’s base of assembly and operations by compensating in several ways for the time and trouble required to erect, staff and work in such a remote, out of the way location. For one thing, as a large bonus the lonely, hurtling island in the sky was practically immune to all but the most determined prying eyes. Moreover, certain objects in the neighboring flotsam were relatively rich in useful, necessary heavy metals. Thirdly, prospective flight-testing could be accomplished with only minor worries about detection by the U.N. ships visiting or stationed at military bases scattered among the sunward planets, or for that matter the lonely outposts on Jupiter’s satellite, Ganymede, and beyond in the truly remote research base on Saturn’s frigid moon, Titan.

Das and I learned that a Class II Lemmon Tokamak System afforded Demeter’s base on Ceres more power could conceivably be used. Alexis described the working quarters as being not exactly roomy, but comfortable if utilitarian, since the asteroid sustained barely enough gee to allow something similar to walking. She explained how the starship’s bare-bones hull had been assembled in lunar orbit by a hand-picked crew of technicians and riggers, then boosted to Ceres “piggy-backed,” a strap-on attached to the hull of Paul’s un-named, un-numbered “yacht.” We were told the starship had been undergoing outfitting for many months. The first FTL flight-test was penciled in to take place in approximately a half-year.

Alpha Centauri in ten or eleven weeks! Each time the notion flashed through my mind it produced a pinging thrill.

As always, however, a little bitter is invariably mixed in with the sweet. Transit aboard a long-haul spacecraft can be a crashing bore. While still under constant acceleration, I worked out in the small gym, played a daily round of squash with the Raja, and between times read a great deal of background material on Demeter and listened to a lot of canned music. Hanging out on

the conning bridge, I also listened with half an ear to one or another of Steve's tales of peccadillo and/or feminine conquest, sometimes a simultaneous occurrences. I also gave a lot of thought to the project, especially the coming part I was slated to play in it.

I hate to mention that seeing the same faces watch after watch, and meal after meal, even if the most divine among them belonged to Alexis Lemmon, became routine and monotonous. I also tried to get familiar with the way Alexis turned into a changeling victimized by alternating random moods. One minute I was, "Dear Roger," yet the next time I encountered her in the commissary or a passageway she nodded in a preoccupied way, as if having forgotten my name.

Strangest of all was the fact that only the Raja and I ever seemed to have any free time. Alexis hardly ever had a spare moment to converse. She was forever holed up in her stateroom, or having a solitary meal, or talking earnestly and privately with Nobbots, or sleeping. One thing you get plenty of aboard a ship in trajectory is sack time. Steve and the other crewmen mostly kept to themselves.

As I said, trajectoring toward Ceres proved to be a crashing bore until one fine "day" not long after the thrusters fell silent when the fusion torch shut down, and microgravity enveloped the ship. We were in freefall only a short time before the peaceful shipboard environment did an abrupt, hundred-and-eighty-degree turnabout, and we segued into sheer, unadulterated panic.

* * *

Plain, ordinary Squash is a fine game to play groundside. Freefall Squash, on the other hand, is played under microgravity, and to put it mildly is an *entirely* different ballgame. You have to involve yourself in a steep learning curve to figure out not only what you're supposed to do, but also what you've been doing wrong. I've always prided myself on being a fast learner, and as the adage has it, "If you can do it, it's not bragging." One shipboard "afternoon" I admit to having thrashed the Raja more soundly than usual. You don't use a racquet, making Freefall Squash more like handball, except the ball itself, while slightly larger, is softer. If announcing triumph and ragging Das about being victorious sounds like braggadocio, well, then that's what it was. Ordinarily a good sport about losing, and in every other respect a *pukka Raja* few would find fault with, in a Freefall Squash court Das turns into a four-thumbbed klutz who's a menace to himself, his opponent and any bystanders foolish enough to join him inside a court's six flats.

Wearing extra padding and goofy-looking plastic football headgear instead of the usual foam rubber "crush cap" favored by most players, Jeff lets himself forever be suckered into chasing a wild shot; most times, this sends him crashing headlong into one of the four bulkheads, the overhead, or deck, except in freefall the "deck" and "floor" are indistinguishable from any of the other four flats.

The fun thing about Freefall Squash is that you can't stop, start, or change direction like you would in an up 'n down groundside court under earthly gravity. Once you hit the wall and push off, you're stuck with the new trajectory, and your opponent knows it. The kick of Freefall Squash involves beating your opponent at his or her own game by anticipating his or her flight path, and sending a passing shot whizzing past out of reach. But of course he or she naturally anticipates your anticipation, while you anticipate . . . And so forth, and so on.

Anyhow, Das departed the court under what for him was a mild case of the sulks. "Hey," I called after him, setting fire to the oil on troubled waters, "don't be a sore loser.

He responded with an epithet too nasty to record.

“The only thing worse than besting a sore loser,” I told him, “is getting whipped by any kind of winner.”

The single door to the court clicked shut as Jeff went off to lick his wounds.

I drifted over to capture the slowly caroming ball on the fly, chuckling to myself at the Raja’s uncharacteristic pique when the warning buzzer sounded, a necessity when a newcomer enters a freefall court, else chance having the rubber ball, or player, slam into the newbie’s lap when he or she peeks inside. I supposed it was Das coming back to chivvy me for my parting crack, and stabbed the switch. The door slid open, and there floated Alexis Lemmon, one dainty, gloved hand clutching the handhold alongside the door.

She smiled cheerily, looking ready to do combat. “Hullo, Roger. I ran into Jefferson just now in the companionway. He said you two were finished with the court. I thought perhaps we might have a game.”

“Delighted!” I stared into those limpid blue eyes until her gaze wavered and she looked away. Her wavy blonde hair was stuffed under a shocking pink crush-cap matching her chic, padded pink coverall. She adjusted her gloves while I congratulated myself on the unexpected opportunity to have her all to myself, and asked her handicap.

“Oh,” she said airily, securing the crush-cap’s chin-strap, “let’s not make things too complicated. I haven’t had a chance to play of late. I was once quite good at it. Shall we?”

That diminutive blonde beauty proceeded to smash my pitiful game into kindling. Much more than just good, she outguessed or outmaneuvered me each and every time, and breezed around the court like a professional, stroking equally well with either hand. She didn’t use only her feet on the walls, either; she caromed off the bulkhead flats, the overhead and deck like a beam of light, changing her angle of incidence and angle of rebound at will, propelling herself with deft hands, feet and doubled knee flexures, in whatever order she chose. What to me was worse, she managed to look effortless doing it.

Between the padding and the even sixty-eight Fahrenheit degrees maintained aboard ship, I was soon dripping rivulets from every pore. I did manage to win one point with a desperate, all but accidental backhand slap that shouldn’t have connected at all. Other than that lucky stroke, I was hopelessly outclassed.

We arrived at game point none too soon to suit me. The ball sang past my ear while I was still untangling my feet at the wall. I drifted away puffing, really blowing hard. “Merciful . . . God! Did Jeff send you in . . . to wreak vengeance?”

Smiling the enameled smile of a predator, Alexis checked her momentum after a casual rebound, absorbing the impact with bent knees and ankles. “Actually, I cheated, Roger. Don’t suppose you knew I was born in freefall.”

“Really?”

“In trajectory ‘twixt Mars and Luna. I once warned you about being a dreadful tease.”

Still wheezing breathlessly — an aftereffect probably due more to emotion than exertion. “Didn’t know about that, or the, uh . . . teasing, either. But being forewarned . . . doesn’t mean I’m forearmed. Mind if we . . . rest a while?”

“Certainly. You really could become quite good, you know.”

“Uh-huh, for someone with . . . two left feet, born on a lumbering planet, not in space.”

“Seriously, I didn’t say it to make you feel better. I meant it. With conditioning and practice, you’d be pressing me in no time. But you aren’t angry, are you? I was playing Freefall Squash before I learned to walk. Literally.”

“You mean sore because you wiped me out? No, not in any way. I can be very liberal-minded about women athletes.” I grinned my most splendid, most democratic grin. “Especially,” I blurted, “when they’re as lovely as you are.”

She accepted my daring compliment with a blink. We hung there in midair a bit longer, gazing at one another. It was a lot more enjoyable than it probably sounds. “Alexis,” I finally said in a kind of tentative way, “I know next to nothing about you, other than . . . I mean not . . . about you yourself. What I should’ve said is . . . You’ll think me rude for asking on short acquaintance, but are you . . . ? You’re not married, are you?”

“My,” she said, “the direct approach. “I thought it was extinct.” She used the sleeve of her shocking pink jumpsuit to pat delicately at the perspiration beading her forehead. “I’m single, yet too young to be an old maid. I think perhaps it’s . . . I’m not sure.”

“You’ve yet to meet Mr. Right?”

“Um, yes; something like that, a gentleman both intellectually and physically stimulating. At least not to the point of signing a contract. And, you?”

“Me . . . ?” By then I was not only feeling intellectually and physically stimulated, but woefully inadequate and uncomfortable for opening my big mouth. “Oh, no. Me . . . neither.”

She smiled again in a way that would melt lead, then impulsively reached out to touch my feverish cheek.

The side of my face tingled, and a rush of blood filled my head with cataract noises.

“Wearing one’s heart on one’s sleeve,” she said, “is an old-fashioned attribute, virtue, whatever is may be called. You believe you’re attracted to me, Roger. It’s very flattering, and also peps up the ego because I like to think I’m still attractive. But mightn’t the fact that I’m the only woman aboard have something to do with it?”

“Not a blessed thing!” I insisted.

“You’re sweet. Gallant, too. But be honest with yourself. If you had chanced to see me in a restaurant, some other crowded place, would you have given me a second glance?”

Everything seemed to be moving at supersonic velocity, far too fast for my humdrum sensibilities to catch up. Flustered and on the verge of being out of control, I did my best to cope with her question. “A second glance, and then some, Alexis. I know how busy you are, what with Demeter and everything else, not to mention being a wealthy celebrity. I’m a dull astronomer, and anyone can tell you how rotten scientific types are at making light conversation, let alone, uh . . . I can’t come close to your social standing, or your prominence in the —”

“Stop right there!” she said sharply. “Oh, Lord! If only you knew! Dear Roger, what you term ‘social standing’ vanished years ago along with reindeer herds, privacy, rain forests, and a thousand other marvelous institutions and customs. We’ve no choice but to live out our lives in the harsh modern world, and you must not, repeat *not*, think for one instant you’re beneath me in any sense term, or for that matter beneath anyone else. I won’t have it, because you are *not* in any way. Nor do I find you the least bit dull. I’m by no means wealthy anymore, either, if it’s any consolation. Much of father’s inheritance has been poured into Demeter.”

My brilliant response was to say, “Oh.”

We hung there in midair a while longer, locked eyeball to eyeball for a second eternity. “Does that, uh . . . I mean, is there a chance we could . . . ?”

She laughed aloud, her merriment echoing in the squash court’s confines. “Who’s to say? Best, perhaps, if we play it by ear, don’t you think? It really is more fun that way. Nor am I at all shy about confessing also being drawn to you. But then I suppose men have a sixth sense about such things, don’t they?”

“Oh, uh . . . sure.” Don’t know anything about sixth senses, but by then the five that came as standard equipment were making my head vibrate like a tuning fork.

“Demeter must always come first and foremost, of course,” she said sternly. “Always, Roger! No exceptions; it’s a given you shall have to keep in mind. If you were to become the least bit possessive, or make demands on my time I was unable to satisfy, well . . . I fear it would make for a rather swift ending.”

Then, with no more warning than that, my arms were suddenly full of soft, clinging woman in a shocking pink jumpsuit. The scent of her hair peeking out from the edges of her shocking pink crush-cap hit me hard enough to make the buzzing sounds in my skull climb fifty decibels or so. I’ll never forget that first kiss, not its texture, flavor, or overwhelming warmth.

Alexis pushed me to arms’ length, a tentative Mona Lisa smile playing on her glossed lips. Like a chameleon, half-taunting executrix, half-yearning temptress, she said softly, “Come, I expect we should have another go at squash.”

“I’m too weak.”

“Nonsense! Well slow the pace a bit if you like.”

I gave in, and then gave the match a yeoman like try, but my heart wasn’t in it. Fast-paced or snail-paced, she could have trounced me using one hand while whipping around the court at half-speed. This time I did win three points, but when we left the court I knew I might have won something a thousand times more wonderful than any game prize.

I felt humble, and to be truthful a trifle scared.

Seven - Welcome Mat

Thrilled to the marrow of my bones in the wake of our squash court encounter, I felt ten meters tall, with wings on my heels. Opening the door to the court, I escorted Alexis into the passageway. The new love of my life was not then, nor will ever be given to idle chatter. I can recall no chit-chat as we pulled ourselves along the freefall safety lines, and rounded into the main companionway running all the way aft to the power room bulkhead.

We were brought up short when the shipboard alarm klaxon began squalling.

Alexis tensed and arrested her progress by clutching the freefall safety line with a gloved hand. “Something’s happened.”

The klaxon’s intermittent honking continued. Tugging heartily on the safety line, we sailed in tandem toward the ship’s forward section. Refusing to wait for laggardly me, Alexis zipped ahead like a frightened bat. Badly outdistanced, I saw her halt at the intercom station in an alcove abaft the galley, and slowed to a stop beside her, burning my hands on the safety line.

She punched buttons. “Bridge, is there the problem?”

“Alexis, we’ve been looking all over for you. Where the hell have you —”

“Playing Squash,” she said. “What *is* it, Steve?”

“Get up here now, now, now. This you have to see for yourself.” There was a faint pop as the pilot killed the circuit.

Off like a bullet, Alexis checked her flight on the bulkhead at the far end of the long axis companionway, uncoiled like a recovering spring and disappeared from view.

I fumbled and bumped my way to the conning bridge, finding Steve belted into the acceleration couch at the helmsman’s console; Nobotts and Alexis floated beside him, peering over his shoulder into the large radar display tank.

I drifted up next to them and clutched the grab rail encircling the conning pedestal, staying well back, out of their way.

“There!” exclaimed Paul after an interlude of expectant silence. “See it?”

“Yes-s-s, I . . . think so.” A grace note of surprise sharpened Alexis’ diction. “It’s terribly fuzzy,” she added, “indistinct . . . Look, it’s vanished!”

“Comes and goes, brightens and fades time and again,” announced the pilot. “Damn blip never hangs in there long enough to get a ranging fix, just a solid bearing.”

“Has it maintained one bearing?”

“Dead abeam,” replied Steve, “off the portside bow. I was testing the automatic collision-avoidance radar system, prepping for standard approach procedure inside the asteroid belt. If not for that, I’d never have noticed the . . . Whatever the hell it may be!”

We waited some more, studying the radar tank. After a period of staring into a featureless display, it begins to null your senses. I blinked and looked away, thinking to let my vision adjust and recover depth perception, I watched seconds dribble from the digital chronometer installed above the astrogation console.

Alexis’s sharply indrawn breath snapped me back to attention. “There, it’s back again! Steve, ever seen anything remotely like this?”

“Nope, not before or since. Not just plain no, either. Hell no! It’s a . . . something that by rights shouldn’t *be* there.”

Steve was correct; the flickering, ghostly return had to be backscatter from *something*, a material object. Whatever it turned out to be, it was definitely out there, except that whatever type solid object it was had no rhyme or reason to exist. After another eight or ten seconds, the radar return dimmed, faded and vanished.

“Whatever it is,” said Nobbotts unhappily, “I don’t like the fact that it’s pacing us.”

“Nor do I care for what you’re inferring,” said Alexis. Meaningfully, she and Nobotts exchanged glances. “Steve, could be some phenomenon generated by this ship?”

“If so, I can’t begin to guess at the mechanics behind such a screwy phenomenon.”

We stayed there, poised around the radar display tank, watching and waiting, each harboring private, unvoiced speculations. The blip reappeared again from nowhere, except this time the ship’s sophisticated imaging radar system managed to define it as a distinct object. It faded again, brightened, faded, suddenly sprang into life and lit up in the display tank as a sharp, solid “something” which unquestionably returned authentic radar backscatter.

“Gotcha!” sang Steve, jubilantly punching a keyboard. “Roughly twelve clicks out, and gradually closing with us.”

“Is it a ship?” demanded Nobotts.

“What else, Skipper? Could be a stray rock from the belt zipping along on the same vector and velocity as us, but how likely is that? Has got to be a ship, but not like any spacecraft I’ve been told about. Talking in rough scale, it’s a damn cigar maybe four times our length.”

“That large?” said Alexis.

“Huge, Alexis. *Really* big!”

A passing sensation of dizziness swept through me; the others must have also felt it, because Alexis and Paul flinched simultaneously, and reached for the grab rail together, too fixated on the radar image to comment. I watched the thread of light swell, grow into a brighter, stretched-out lozenge until my eyes watered. I glanced up at the digital chronometer readout again, and cried, “Hey, the clock’s stopped.”

Wearing an impatient, “don’t-bother-me-now” expression, Paul made as if to say something else, but just then Steve and Alexis grunted in unison. Frozen in place, they had both turned to stare bug-eyed at something behind me.

Clutching the grab rail one-handedly, I pulled myself around. My bowels churned; the small hairs at the nape of my neck lifted.

The moist color and texture of raw liver, it was squat and malproportioned as a doll fashioned from globs of putty. Bipedal, the gross, webbed “feet” caricatured molded plastic swim fins. Bloated “arms” depended from wrinkled hemispheres imitating shoulders, and terminated in dozens of splayed filaments of a very dark hue that was not quite black. There was no neck; where the head should have been, a globular, matte-black fishbowl not much smaller than a basketball threw back dully glinting highlights from the conning deck’s indirect illumination. Floating in midair like a grotesque rubber doll, it gave off a faint sweetish odor like a melange of all the spices I’d ever sniffed — a remotely familiar scent, yet cloying, and verged on being sickening. The filament “fingers” began to writhe spasmodically, which made having to look at it *much* worse.

My children, This One senses revulsion in your infantile minds. Of and in itself, this is of no consequence whatever. Your provincial prejudices were anticipated.

The instant it registered on my auditory nerve, I experienced a pang of recognition. I knew the monotonal, uninflected “voice” for what it was, although it “sounded” more hollow and pungent, with deeper, more resonant overtones than had Mr. Smith’s.

Nobotts demonstrated an overlarge measure of spine by asking bluntly, “Who and what are you?” in the same, unruffled tone he might have used to inquire the time of day. “Where are you from? What do you want of us?”

This One’s identity and provenance are immaterial, the thing informed hollowly. Since the purpose of our visit has naught to do with your plaintive queries, for the nonce, put aside your myriad questions and pay heed. This One’s sole purpose in this impromptu visit is to impart vital instructions which must and shall be heeded without question nor argument.

The dry, colorless “voice” hammered in my mind. *Your juvenile species is ostensibly endeavoring to devise a crude, innovative means of transiting to a relatively nearby stellar system, with an eventual goal of vastly extending the boundaries of your natural place of existence. This must not yet occur, my children. Your prospective venture, though strongly favored by society, cannot be countenanced until your kind achieves a degree of added maturity.*

A palpable stillness enveloped the conning bridge. “Do you mean us harm?” Nobotts pulled himself forward, boldly confronting the misshapen creature.

This One wishes you neither harm nor well being, or anything in the gulf between those poles. The liverish thing paused, tendrils writhing spasmodically. We desire only to communicate a towering sense of urgency with regard to a singular facet of your ambitious venture which must and shall be heeded, nor will you be permitted any choice in the matter. Despite your facts and fancies and precocious dreams, at the current nexus the society of intelligences among which our kind proudly numbers itself expressly forbids the rude intrusion you are guilty of not merely contemplating, but proactively seeking to forward.

I admit to being scared very close to the point of strangling on my own spit.

Round-eyed, yet clearly fascinated beyond measure, Alexis said uncertainly, “Despite all your . . . good intentions, we should like to ask why this . . . society of intelligences wishes to forbid us to carry out the program you have apparently have learned about?”

Questions, questions! Despite a lack of inflection or nuance, an ominous threatening note had crept into the thing’s “speech.” It suffices for true intelligences to warn adolescents of the dangers inherent when daring a venture into unknown regions of the forest, portions of which are beset with lethal hazards younglings of your stripe cannot begin to comprehend, dangers which cannot be enumerated, ticked off and toted on a balance sheet. This One has expended an inordinate amount of time and energy in order to gain a minimal glimpse of woeful cultural, political and socio-economic environments presently sundering your primitive place of existence. Having studied you and your promising kind from afar, learning about you in close proximity was an eagerly anticipated experience. Do not disappoint This One by exhibiting childish obduracy, ignoring our wise counsel, or thinking to again pose childish questions. We shall restate our caveat, the full meaning of which has been only partially interpreted. Your kind must definitely remain in the nest of your ancestors until a proper level of maturity has been achieved. To be impetuous at this nexus of your growth cycle, and persist in your fumbling endeavor cannot help but precipitate grave, unintended consequences.

Paul scowled. “Your concern over our fumbling endeavor is touching.”

Which is quite proper, my children, for your endeavor is of such grave concern that it leaves This One no alternative but to threaten a strenuous, serious reprisal should you fail to heed our warning, and that is a given. The development of your kind has been surprisingly swift, impetuous and amazingly productive. Your juvenile species will eventually make definite, potentially invaluable contributions to interstellar society. Would you knowingly truncate all of your demonstrated promise by an act unwisely rash and premature?

No one spoke for seconds. Alexis broke the pregnant silence. “I would imagine the ability to visit the star system nearest our own also entitles us to be welcomed into the . . . society of intelligences you mention. What is there to fear?”

More lurking perils than your immature mind can begin to grasp.

Alexis frowned in perplexity. “Why haven’t we the right to break free? Especially since we have earned that right the hard way, by an attempt to consummate our efforts?”

Your inherent obstinacy, plus the magnitude of your swollen collective egos, is apparent. You display the positive attributes of learned adolescents, yet insist upon exhibiting the tantrums of spoiled, truculent children. Those characteristics, however, do not bear upon the issue at

hand, yet may still cause your kind much pain and suffering if left uncorrected. This One's rebuttal must therefore be stern, and as obdurate as yours, but not truculent in any sense other than by necessity, and a fact now quite clear in This One's mind. As this juvenile stage of development, your species will never be deterred by logical reasoning alone.

At which point Steve drew his hand laser in one fluid motion. Teeth gritted, he lifted the emission bell above the conning pedestal's cowl. "Say the word, Paul."

Aghast, Nobbots cried, "Holster the weapon!"

"But whatever the hell the damn thing is, it's *threatening* us. Let me . . ."

"Put it away!"

Glaring steadfastly at the liverish creature, the pilot reluctantly did as he was told.

Alas, youthful impetuosity must be served. This One anticipated a threat of violence, for violence and youth go ever hand-in-hand. The thing's "finger" tendrils were writhing faster now. In the final analysis, my children, violence begets naught but reciprocal violence. True intelligences have surpassed the need for violence. You are fortunate to be confronted by This One, not some member of a less well-endowed intelligent species.

Our discourse must now conclude. Although predictably fruitless, it comprises our honorable attempt to dissuade you, and thereby avert the severity of your chastisement. Before departing, a word of advice, and a last repeated warning. Do not attempt to proceed in accordance with your far-reaching ambitions. This One advises you thusly, knowing full well the futility of dispensing the message, only because integrity demands carrying out our mission to the letter. Now, once again lastly and firmly, do not travel onward to your proposed destination, for there, even now are being sown the seeds of your destruction.

The hideous thing wavered, assumed the outline of a translucent, outrageously configured silhouette, and vanished with a barely audible organ point of sound caused by air rushing in to fill the partial vacuum, adding a cumulative grace note to the disappearance.

Seconds passed, during which the momentary vertigo I'd felt earlier returned and flooded through me. All four of us turned to the radar display tank in unison.

The strange blip was gone. The shipboard subjective timing system was again functioning properly.

* * *

"What the hell were you thinking?" the pilot demanded furiously. "Stinky the Spice Monster drops in, acts like he owns the damned ship and everyone aboard, and you won't let me chop the sumbitch."

"That will do!" Nobbots extracted a tissue from the slash pocket of his jumpsuit, mopped his high forehead, then worked it around under his chin. "Turn up the blowers," he directed. "Let's get rid of this stench."

Trailing grumbled profanities, Steve unbelted with a jerky motion and shoved himself away from the conning pedestal with a violent thrust.

"Good man to have at your back," declared Nobbots when Steve was out of earshot, "but not very imaginative."

"God help us, neither am I!" Alexis shuddered. "Maybe never again. I'm still in shock. Difficult to believe that . . . that *thing* was real."

“Real as real gets,” I said. “Now we’ve all met a telepathic alien. But I admit ‘This One’ made Mr. Smith seem like Apollo in the flesh.”

“It referred to itself in the third person,” mused Paul. “Interesting, but not what could be called revelatory. Was that the way Smith sounded to you, Roger?”

“Close,” I said. “This One’s . . . ‘voice,’ to use that term, had more timbre, but the same uninflected, monotonal quality, like computer-programmed audio. If a recorder had been running, we’d hear only what we said ourselves said.”

Nobotts snapped his fingers. “One was. The ship’s command log runs continuously.” He tugged himself to the communications console, depressed a switch, and then another. We heard ourselves oohing! and ahing! over the blip in the radar tank, then nothing for a while. Finally I heard my exclamation about the chronometer stoppage. Another period of silence ensued. Paul’s sudden questions sounded disjointed, out of place: “Who are you? What do you want of us?”

He switched off the playback. “That,” he said, “settles the telepathy issue.” He watched Steve sail back to the command pedestal, belt himself into the unfolded acceleration couch as if nothing untoward had occurred between him and Paul.

“Lord, where does it leave us?” Alexis hugged herself. “I felt so woefully inadequate, so insignificant. It was my impression that ‘This One’ represents a culture whose technology and everyday accomplishments are incredibly . . .” She broke off. “I felt like a child being talked down to by a schoolmaster.”

“Damn straight!” Steve sounded disgusted. “Stinky the Spice Monster *wanted* us to feel like helpless kiddies. Con is con, here in solar space, or somewhere out there in the galaxy. Stinky’s a prime example of con artist. I know when someone’s running bluff, which is exactly what that short, unsweet session amounted to: a king-size front to finish scam job.”

I expected Paul to rebuke the pilot, but he did nothing of the sort. “What led you to that conclusion?”

“Aw, f’Chrissake, Paul! I’ve played enough poker in my time to pick up on someone who’s betting heavy, but maybe holding a busted flush. ‘Seeds of destruction’ my kiester! Think for a minute about what that high ‘n mighty ‘This One’ slug said about having destruction in mind. If that was the straight skinny, would it have bothered to run past us all that don’t finish what you’re doing crap ‘cause you’re way too immature to find a welcome wagon waiting for you? Stinky would’ve skipped that whole rigamarole and just wiped us out. Whammo! Maybe the Ceres base, too. It talked like it knew all about Ceres.”

I sorted through Steve’s thesis, revolving what he’d said against the advice and “wise counsel” warning tendered by the think he’d labeled “Stinky the Spice Monster.” The more I thought about his analysis, the more sense it made. “Come right down to it,” I put in, “it did mention something to the effect that true intelligences never resorted to violence.”

“I sure did, Rog!” endorsed the pilot. “You’re on the right wavelength.”

“It may be as you say, Steve.” Looking even more troubled, Alexis thought about it, and changed her mind. “Then again, what if its version of ‘violence’ doesn’t correspond to ours?”

“Visiting us in mid-trajectory,” put in Nobotts, “also provokes an interesting speculation. Our spicy friend voiced genuine concern over what it apparently considered our impending success. If so, doesn’t it assure us that Casey’s taken a viable approach in his design?”

Elated, Alexis cried, “I say, what a smashing notion! On to Ceres! If we’ve learned how to reach the stars, by God we’ve also earned the right to go there. What’s our ETA, Steve?”

The pilot closed his eyes. “Hmm-m-m, another hundred and sixty hours or so of freefall trajectory till we swing ship and retrofire, then two more weeks under deceleration boost. Call it three weeks, give or take a watch or two.”

“Wonderful!” Alexis sounded smug.

Reborn enthusiasm made my lady love extra-talkative over dinner. Soon afterward, however, while we were having coffee in the lounge, her vivacious mood sagged. She excused herself, pleading weariness after an exciting if troubling “day” stewing about the double-ugly This One thing, the potential consequences of its visit, and the mystery of how it had managed to find us and come aboard in trajectory. I pulled myself hand-over-hand to my cubby, made a half-hearted attempt to read myself into drowsiness, gave up, used the ultrasonic toothbrush, undressed and got into the foldbunk, loosely clipping the restraint harness over me.

Sleep wouldn’t come. Bits and snatches and refrains leftover from the tense scene we had played with that odoriferous alien monstrosity kept surfacing in my mind like a series of surreal holograms. It was damned difficult *not* to worry about what might be in store, if not impossible. Deep in my subconscious a gnawing suspicion kept boiling to the forefront. I couldn’t help wondering if the pilot’s simplistic dismissal of Stinky’s alien intents and purposes as some type of interstellar confidence game had been dead wrong.

I must have drifted off. I remember coming awake all at once, startled by the soft touch of a hand on my shoulder. No more than half-awake, I examined the hand in the dimness. It belonged to Alexis Lemmon.

“Roger, hold me. I’ve had the most hideous nightmare. I can’t shake it, can’t bear to be alone afterward.”

So I held her. We talked it out, all of it — alien visitations and starflight and the endless universe out there patiently awaiting our arrival. We talked about our kind, about their foibles and strengths and passions, about what we humans may someday become with perseverance and a little bit ‘o luck. We talked about love, death and the hereafter. We talked about how a man and a woman could successfully share their lives if they remained forthright and fair and had the necessary resiliency and the firm, uncompromising will to make their union work.

I held her all through that magic shipboard “night,” held her, comforted her, cherished her until we eventually melded together and merged into one being, with one heart, one soul.

Just before she fell asleep in my arms, Alexis mumbled, “Our unearthly neighbors have put out the welcome mat, Roger, and I’m afraid it says, ‘Stay Away’!”

A sobering thought, but if it meant another “night” like that I’d put out the welcome mat, myself, and invite Stinky the Spice Monster to drop by any time he was in the neighborhood.

Eight - The Rubber Room

Needless to say, though I say it anyhow, we paid no heed at all to Stinky’s advice, or its stern caveat foretelling, “The seeds of our destruction even then being sewn.”

Little more than one shipboard week after the smelly alien’s appearance, the ship turned its tail to the vector of our long, curving trajectory to the asteroid belt, the fusion torch belched

once, then took hold and roared steadily. Under one full gee of deceleration we all suddenly seemed to weigh a metric tonne. After thirty-two “days” drifting about in languorous freefall, normal weight hits you like an unbearable burden.

The hours wore by. The leaden feeling in my limbs and feet gradually diminished. The Squash court had grown a floor, four walls and a ceiling instead of simply six flats inside an elongated freefalling cube. Besting the Raja, and getting whumped by Alexis, was no longer half the fun it had been in zero gee prior to Stinky’s spicy, arrogant wake up call. The final weeks under deceleration nevertheless passed in rapid succession.

Seen in false perspective after Steve maneuvered the the ship, and brought it dead in space, Ceres resembled a fat Idaho potato pocked and dinged with craters and craterlets. There’s no refractive “fill” in vacuum, hence the asteroid’s half not illuminated by wan sunlight looks “gone,” as if an enormous something had flown past and snatched a humongous bite. The asteroid will never be a source of income for travel agents, yet in its own stark way it’s a sightseer’s paradise. Beyond the too-close, agoraphobic horizon, looking into the in-vacuo starry firmament from the asteroid belt is no different from viewing the starry firmament from anywhere else. Most of the scattered flotsam thereabouts chases round the Sun pursuing much the same vector and velocity as Ceres, so when you look at the reproduced display you see lots of distant stars in addition to the asteroid itself, except most if not a all of the “stars” are actually large and small chunks of co-orbiting debris.

Although he’s youthful and impetuous, Steve apparently owns a master pilot ticket. He backed the ship down without incident — no surprise; he’s had lots of experience, having piloted the back-and-forth run a total of three times. Landing on an airless body sustaining only five one-hundredths of earthly gee is normally not a problem, but keeping the ship grounded instantly becomes one. Four crewmen stationed at the base came out to meet and lock down the ship at touch-down. Once it was secured, offloading passengers and cargo began.

We donned vacuum gear, clambered down the rungs of ladder inside the umbilical tube, and either rode aboard or clung to the open cargo-laden trak-truk that trundled across the naked rock to Demeter’s base. The structure itself more than made up for the monochromatic desolation of Ceres’ surface, affording softly lighted corridors, utilitarian working cubicles, a pressurized assembly hangar that would’ve done justice to a modern lunar factory, and living quarters we were shown into that quickly turned into homes away from home. Whoever they were, the benefactor nations backing and partially funding Demeter had neither skimped nor pinched pennies when it came to outfitting the base.

The Raja and I stowed our personal gear in the assigned quarters we were to share, met a raft of assorted new colleagues and associates over coffee in the commissary, and were invited into the assembly hangar for a pristine glimpse of the one and only starship ever constructed by human minds and hands. At first sight, it proved a major disappointment. My reaction must have matched that of Das. I suppose our expressions gave us away, because neither of us had the guts to come right out and say how little we thought of what we were seeing. In my case, after hours of fertile imaginings I couldn’t seem to find the words needed to bolster my sagging illusions.

A featureless titanium alloy lozenge roughly twenty-plus meters in length, and eight or ten in diameter, the “starship” looked incapable of dragging its tail back to Earth-Luna, let alone streaking through multidimensional n-space to far Centaurus in eleven subjective weeks.

A roly-poly Asian bulging the seams of the unclean jumpsuit he wore appeared in the open midships airlock. Disdaining the use of a ramp in place, he stepped blithely into thin air and drifted down to the hangar floor with indolent ease.

Jeff's spirits as well as mine fell with him.

In a few words, Alexis performed the introductions. Dr. Kenneth Clarke "Casey" Chew offered a limp hand more or less intended to be shaken by the Raja, then extended it to me in the manner of a votive offering. A stolid, wholly self-contained individual, Casey acted outwardly nonplused by our arrival, nor did he seem overjoyed to welcome Alexis back into the fold. He may well be the foremost practical physicist since Alexander Lemmon, but to me at that first meeting Dr. Chew exhibited the glowing personality of a pickled frog.

Having spoken hardly at all, Casey spent a few ticks absently inspecting the column of empty air between Jeff and me before wandering off. Grinning apologetically, Alexis shook her head slowly and explained Casey as the most single-minded individual she had ever known, or hoped to know. "He'll win few popularity contests," she told us, "yet I've become convinced his fantastic mind is hard at work even while he's asleep."

Alexis gave us the grand tour — sorry, make it the compact grand tour. On the inside, the ship looked even less prepossessive than when viewed from without. Utility everywhere was the order of the day; few concessions had been made to creature comfort — damned few to be truthful. The conning bridge resembled museum archives depicting cramped airliner flight decks a century and more in the past, and of course lacked anything resembling a window. Tightly woven metallic-mesh covered every square decimeter of the interior, a feature Alexis explained as necessary to ensure the most universal hadron alignment possible during powered n-space operation.

We peeked into one of four cramped "staterooms," a polite term for tiny cubicles barely large enough to turn around in, furnished with a narrow foldbunk, a small fixed chair and a miniature wardrobe cabinet. Jeff and I trailed Alexis aft, getting in the way of engineers and technicians, most of whom didn't bother to stop work and greet her. Someone had taped a waggish sign to the power compartment bulkhead:

$$E=Mc^2 \pm 1 \text{ db}$$

The mini-fusion system was inaccessible, as were most other power compartment equipments. The Lemmon mini-Tokamak destined to drive the propulsion torch, and the adjacent compartment housing Chew's n-space transition gear, took up the vessel's entire stern. I wasn't familiar enough with fusion technology to recognize much of what there was to be seen on our side of the major bulkhead shielding the crew from tritium — a stable, mildly radioactive isotope of hydrogen. Sheathed cryogenic bus bars leading from the fusion tokamak hinted what it was all about power-wise — gigawatts!

Chew's n-space transition system consisted of seven electronic black boxes installed in close proximity to a rectangular canister half the size of a desk thickly grown with electrical connectors sprouting cables. A pair of technicians busy raveling spaghetti-like wire had to contort themselves under Ceres' all but nonexistent gravity to access the unit's deep innards.

That "evening" during our first dinner in Ceres, Jeff and I were introduced to Dr. Robert Salmo, a general practitioner in early middle-age Nobbots had recruited to care for the health and well being of the men and women of Demeter's staff, now totaling fifty-six including the Raja

and me. His professional mien undercut by scraggly chin whiskers, Dr. Salmo would have done well to lose the excitable brown eyes he used to examine us newcomers. He chatted with us during the meal, if only in desultory fashion, and politely inquiring about our work, although it was plain to see that his interest in astronomy extended not very far. Over after-dinner squeeze tubes of coffee, I heard him ask Nobotts if the ship's cargo manifest included the ordered medical supplies.

"Yes, a trak-truk hauled your meds to the infirmary soon as the cartons were offloaded."

"Good, good, I'm relieved to hear it." Salmo blinked repeatedly, sipped coffee from a squeeze tube. His manner sober, he cleared his throat and said, "Not to alarm you, but at the moment I have two patients under observation."

"Oh?" Alexis looked up. "Whatever for? Nothing serious, I hope."

The physician smacked his lips, grimaced as if he'd tasted something more unpleasant than coffee. "Oh, probably nothing to be very concerned about, it's just, uh . . . The second shift foreman brought them to see me halfway through their watch. He explained how they'd been fooling around, clowning, giggling horseplay while playing catch with some delicate parts they should have been installing. They, uh, haven't stopped."

"Haven't stopped . . . what?" asked Nobotts.

"Uh, giggling, clowning around, joshing each other."

Alexis set her squeeze tube of tea in the holder. "Exactly what are you telling us, Doctor Salmo?"

"I was . . . I didn't think it necessary to bother you with what . . . Well, at first it seemed a minor medical problem," he continued reluctantly. "Both men have been working here Ceres nearly a year without leave, and it seemed natural for them to be . . . acting a bit erratically."

"Going stir crazy?" suggested the Raja, reminding us of his usual tactfulness.

Salmo's eyes glinted with annoyance. "Can't say I favor favor that term," he said sharply. "In a sense, my general impression of what could be troubling them is . . . Let's be clear about the fact that my practice is internal medicine. I'm neither a psychologist nor a psychiatrist. I've tried administering selective tranquilizers to both patients, with only moderate success I'm sorry to say. A consignment of more sophisticated medication was slated for inclusion in the current shipment. Now that it's here, I intend to keep both patients sedated and see what develops, if anything. If they fail to respond, it might be necessary to send them home on the next transit."

Nobbots evaluated the possibility, his expression decidedly unhappy.

"You've no idea what's troubling either of them?" Alexis wanted to know.

"I suppose you could call it . . ." Salmo hesitated. "The older of the pair insists he's a well-known holovision comedian billed as Boffo Brown. Personally, I've never seen this Brown perform, but others tell me the patient does a remarkable parody of the comedian's routine. The other man claims to be Brown's agent, except that his client, 'Boffo,' is actually a technician named Maskiewicz."

"Doctor, you've managed circled the globe," complained Alexis with a blink of irritation, "in order to tell us practically nothing. You force me to ask point blank for your diagnosis?"

"Please keep in mind," said the doctor, sounding put out, "what I told you about a lack of grounding in mental health sciences. If a physician more accomplished in defining borderline

psychotic behavior were here, I'm fairly sure he might say both, um . . . patients were exhibiting schizophrenic symptoms."

* * *

The Raja and I spent the better part of our first full "day" at the base trying to discover what it was we were supposed to do after being hauled five hundred million kilometers to do it. Alexis was not helpful; she'd plunged back into the job, and was up to her eyebrows in making decisions on a number of issues that had come up during her absence, and was engrossed to the point of having neither the time nor inclination to scratch anyone else's itches. On the infrequent occasions when Jeff or I managed to locate and corner that stolid stoic, Dr. Chew, our questions were for the most part blithely ignored.

Finally, after a partially wasted half-week, Jeff and I managed to convince Casey we wished to be of service. He gave the matter careful consideration for perhaps a full second, rummaged in a drawer and handed us a stack of purported n-space astrogational calculations handwritten in an admixture of symbology, English, and hen-scratchings I took to be ideographs.

Casey must be seen and possibly heard to be believed. He clams up tight, stays within his alternately sufferable, insufferable self while remaining calm and unperturbed — most of the time. However, get him riled for one reason or another and his not-terrific-in-the-first-place command of English lapses into bombastic Chinese delivered avalanche-style, and not one but two interpreters are required to make others aware of his meaning: the first to translate his cannon-fire exhortations into Mandarin Chinese, the language supposedly shared by he and his wife, Laura, who alone is able to accomplish this miracle, plus a second to turn her version of what Chew has expressed into semi-intelligible English, currently the job of a shy bilingual engineer who worships Chew, but is also scared spitless of him. Afterward, Casey will never admit to having lost his cool.

Never!

Working as a team, The Raja and I used a pair of computer terminals down the hall from Alexis' office to bit by bit, a segment at a time, accompanied by head-scratchings and foul exclamations of disgust, reduce the astrogational gibberish into something relatively comprehensible. Alexis popped in from time to time, staying only a minute to lend a few hasty words of encouragement. Because Das was working with me, she said nothing about what had blossomed between us in transit, yet when leaving the compartment she never failed to touch my shoulder in passing — a warm, tender parting gesture.

Jeff and I were alerted by reports of a ruckus in the assembly hangar filtering through the mutual fog of concentration while working at our computers. Pausing our respective programs, we followed a trio of hustling techs, join the crowd of twenty or more spectators gathered alongside the starship's hull. The audience was privileged to listen to the rantings and ravings of a man in a soiled jumpsuit perched atop the gleaming titanium shell who was preaching a hearty sermon, exhorting us loudly, in the manner of a hellfire-and-brimstone evangelist.

The burly, middle-aged preacher had flair, I'll say that for him. His booming voice had the sonority of a natural orator; it reverberated in the hangar's confines a half-octave higher in pitch due to the lowly seven psig internal pressure maintained in the vacuum-proofed enclosure. A foreman who tried to coax the guy down from atop the starship had little or no success.

Eloquent as well as agitated, the preacher kept firing from the hip with both barrels. He warned us we were all doomed to roast in everlasting fire, and verbosely declaimed a jeremiad that explained why this was so. Here in Ceres, he remonstrated, due to our sinful hubris we were going against God's wishes, rubbing God's nose the wrong way by attempting to invade the celestial sphere that was His and His alone, a dreadful breach of trust God could never, ever forgive or forget. Starflight by we pitiful humans was to the Lord Almighty a presumptuous, degenerate ambition, for the heavens belonged to a vital portion of God's universe, and was the eternal abode of the all-powerful Master of Creation and His Archangels. For insignificant creatures like us, fallen to weakness and wickedness, vanity, noxious foibles and sinfulness, to even presume to *think* about invading God's sacred universe amounted to an unequaled abomination certain to bring down upon humanity the Lord's Terrible Swift Sword. The preacher warned us how God's wrathful retribution would come down on our heads without pity or surcease.

A pair of the his co-workers finally clambered up a workstand near the vessel's stern and crawled forward, trying to soothe the preacher, coaxing him, pleading with him to come down off the hull. Their entreaties succeeded only in doubling his exhortations. He delivered a stinging peroration, eyes wild, arms flailing, that would have filled a congregational tent twice over. But before the rescuers could grab him, he lost his balance in mid-gesticulation, fell on his butt and slid down the starship's gleaming flank, arms flailing, clutching vainly at the slick titanium surface, and tumbled to the hangar floor in lazy slow-motion.

I suppose it might be possible to injure yourself falling ten or so meters in a gravity field five one-hundredths of Earth-normal, but to do it you'd have to work hard. A gaggle of onlookers caught the preacher and carted him off to the infirmary, still shouting dire predictions at the top of his lungs, bellowing strident warnings of an incipient, calamitous conclusion to our dastardly efforts to penetrate God's sacrosanct celestial sphere.

Dinner that evening was a glum, subdued ritual enjoyed by no one. Dr. Salmo did not put in an appearance, and the rest of us, naturally concerned, ate slowly it at all, waiting for the medic to appear and report on the preacher's apparent breakdown.

Nobbots surfaced from a dark brown study, pushed away his semi-neglected meal tray and asked Casey if his experiments could be related in any way to whatever had struck down the mental balance of the first two men in the infirmary, and now a third.

Chew looked startled. "What you say, Nobotts?"

Paul restated the question more delicately, bending over backward to be diplomatic about how he phrased it. "I simply wondered if . . . your work involving high energies could possibly be somehow connected to the erratic behavior of —?"

"Foolishness!" exclaimed Chew. "No danger. Exposure level from shielded tokamak mild, and workers wear radiation badges. What you say crazier than sick men."

Paul did not exactly roll with Casey's punch, but neither was he eager to counterpunch. At the time, I'd been around Nobotts long enough to realize, upon seeing his jaw muscles tighten and relax, that he did not care much for Casey's blunt rebuke. Nevertheless easing himself back in the chair, I thought he might excuse himself and leave the table. But just then Dr. Salmo joined us looking haggard, and Paul decided to stay.

The physician answered our unspoken questions with a frown. “Don’t know what to tell you,” he said, setting down a food tray, sliding into a chair. “It took a hefty jolt of tranquilizer to sedate my, er . . . latest patient. Judging the results, I fear the prognosis has to be unfavorable.”

“I spoke with his roommate,” declared Alexis. “He told me the man had been acting droopy of late, acting a touch out of sorts, keeping to himself more than usual. We found e-books in his personal computer database — the Old and New Testaments, plus a wide variety of religious tracts.”

Salmo nodded. “Jibes closely with the general pattern, if a pattern exists. The original two patients were ardent fans of holovision comic Boffo Brown. I’ve looked over the computer literature on schizophrenia. Some victims commonly suffer delusions based on a major interest in their lives, and quite often many hear voices as well, something that tends to blow their delusions out of all proportion. Many adopt a second personality, a different set of social ethics and mores. Clinical schizophrenia, according to one tract, often manifests itself in wild, ambivalent mood swings — elation alternating with abysmal depression — then proceeds to vacillate between the two extremes.

“What concerns me most of all,” continued the doctor after a reflective pause, “is the potential illness of one or more individuals who might find themselves prone to violence. The notion of an impromptu berserker running amok here in the base, perhaps going so far as to open the installation to vacuum, or to blow it up is . . . well, a frightening possibility you must admit.”

Paul leaned forward. “Are you saying it’s a likelihood, Doctor?”

“No, no. Well, perhaps . . .” Salmo grimaced. “How the hell should I know? Since coming out here I’ve treated a few sprains and bruises, a hairline tibia fracture, some minor burns and one case of chronic insomnia. What the devil *do* I know about the clinical care and treatment of schizophrenics, if that’s the proper diagnosis for a condition afflicting my three patients?”

“You’re doing the best you can,” soothed Alexis. Looking extremely troubled, she asked Salmo if in his professional opinion the three patients should be sent back to Earth-Luna?”

“For the time being, no,” the doctor surprised me by saying. “Jumping to that conclusion could be an egregious. Imagine what might occur if the ship were to depart and more cases cropped up here. Where would that leave us? Oh, we could shout for help via lasercomm, but it would instantly shatter security.”

“That we cannot and will not do!” Paul was adamant. “Too much is at stake to risk exposure now. We’ll work together, give you all the help we can, and tough it out. There *has* to be a reason for these sudden breakdowns.”

Paul’s statement struck a loud mnemonic chord in the strings of my mind. We recent arrivals had been consciously or subconsciously stewing about one possible reason for the rash of unexplained illnesses, but everyone had been leery of saying it.

As I had halfway expected, it was the ever-impulsive Raja who gave voice to our unspoken suspicions. “The seeds of our own destruction,” he said in an monotone.

Alexis sighed. “That outrageous notion has occurred to me more than once.”

“Rubbish!” Dr. Salmo had been advised of the alien visitation in transit, but a word picture of Stinky and an account of his warning was one thing, while being confronted by the smelly, liverish monstrosity and “hearing” it in our minds was another matter entirely. Far from convinced about what he’d been told of our starry visitor, the medic pushed aside his untouched

meal tray. "Sorry. Not that I doubt you, but it's impossible to thinking of an alien confrontation as other than fantasy. How would it be possible for some member of an alien species to induce mental aberration in humans?"

"You'd have to ask the alien," said Das, his nose somewhat out of joint due to Salmo's manner. "Until you witness for yourself a rash of sudden appearances and disappearances by one telepathic extraterrestrial or another, you'll have trouble changing your opinion of what's possible, and what's fantasy. Doctor, you may recall that some of us have had personal encounters with two distinct types of alien beings."

"Please, Dr. Das, I had no intention of, uh . . ."

"Fact or fiction," put in Nobotts, "alien involvement in these sudden medical problems is worth serious consideration." Eyes narrowed, the way Paul stroked his spade beard lent him a devilishly sinister appearance. "Here we are, on the verge of completing the ship, something our visitor acted as if it knew all about when issuing his cease and desist warning. Put two and two together, and . . ." He allowed the somber thought to dangle like a slice of unwholesome bait.

Further conjecture seemed pointless, and on that note the discussion petered out. None of us were able to reconcile the wild notion of starry alien interference with the cold reality of watch after watch spent working in Ceres. Had we faced the issue squarely then, with perhaps enough time to salvage whatever might prove salvageable, subsequent events could have shaped themselves differently, in an entirely different way.

* * *

I came back to the cubicle I shared with Das in late afternoon, intending to collect soiled clothing for the laundry, and came face to face with a stranger toting away my suitcase and carry-all. "Whoa! What is this?"

Mildly chagrined, the fellow said, "Miss Lemmon asked me to move everything to your new quarters."

"My new quarters?"

"Yessir."

I took one of the bags he was carrying and followed him shuffle-sliding down the corridor into the opposite wing of the living quarters, where he tapped on a door. Even before it swung open I had a hunch who would answer the knock.

"Thank you, Carl. I'm sure we can manage from here." Those wondrous blue eyes invited me inside. Alexis closed the door behind her.

"Won't people talk?"

"I imagine so." She came into my arms. "Let them; they would anyhow. Do you mind sharing bed, breakfast and lodging, Roger?"

"Mind . . ? Hmm-m-m . . ?" I pretended to think it over. "I'm convinced devious feminine chicanery lies at the root of this invitation. You want me where you can work your wicked ways whenever you choose, that it?"

Alexis stifled a giggle, but kept a straight face. "Sorry, I hadn't intended to terrify you so badly. Except for Laura Chew and another pair of adventurous wives, the base is a womanless nest of chauvinistic males I should think you'd be delighted to escape."

"Way you tell it, chauvinism sounds pretty dull."

"I wanted you near me, a form of selfishness I imagine."

“Flaunt you selfishness.” I nuzzled the smooth warmth of her cheek. One or two thrilling kisses later, she gently pushed me away. “Come sit down. I have some rather ugly news.”

“Chauvinist that I am,” I told her with a mock shudder, “I’m almost afraid to hear it.”

The two-room quarters we now shared, a relatively deluxe suite complete with kitchenette and dining alcove, was for me a giant upward step. Alexis had converted the small annex into a dual-purpose office-bedchamber. She led me there, chose a seat on the divan, patted the thin cushion beside her. “I’ve dreaded this,” she said. “I fear we’ve had a suicide, Roger, or so Paul believes. Murder isn’t totally out of the question.”

She was right about the dreadful part. I must have flinched. “Who?”

“Primarily, an electrician. As you know, we sorted and chose with a view of dividing the labor to let everyone play jack-of-all-trades, bringing along the fewest possible personnel. He was tending farm in the greenhouse. Another chap working in the greenhouse found him face-down in a hydroponic tank.”

That gave me added pause. “No one saw it happen?”

Alexis shook her head. “Paul rang me up a while ago while I was napping, trying to catch up on sleep. This awful dilemma *has* to be solved without delay. Dr. Salmo and Paul talked to the poor chap’s roommate, who said he’d begun acting moody, behaving somewhat like the other . . . Like his other patient, the one you call “The Preacher.” Salmo theorized that he might have fallen into deep depression, and simply ended it all.”

“Another fruitcake, that what you’re inferring?”

“It’s a logical suspicion, Roger. Yet it makes our prospects perfectly awful.”

I had no trouble agreeing with that. The notion of going around the bend while isolated in Ceres is ten times more uninviting than the thought of going batty elsewhere. “How about you, Alexis? Actually put any stock in the notion of that alien monstrosity being responsible?”

She looked desperately unhappy. “I’ve no basis for making a judgment and, er . . . Do you think it a possibility, Roger?”

“I asked first,” I said, just as the intercom chimed twice.

Alexis shot up from the settee as if pinched, and left the floor tiles under Ceres all but nonexistent gee. “Each time someone calls,” she said, “the situation worsens.” Letting the chime sound again, and switched the intercom to speaker for my benefit. “Yes?”

“Steve here. Looks like Stinky might be back,” reported the pilot.

“Are you certain?”

“Negative, far from it. We’ve been reading the same in-and-out radar blip that showed up in trajectory minutes before Stinky showed. Paul’s with me in the traffic control module. Best hop up here on the double.”

“On my way!”

* * *

We wasted no seconds scooting topside, charging into the cubicle serving as our traffic alert station. Nobbots and the pilot both wore concerned expressions, but neither spoke.

“Is the blip still there?” demanded Alexis.

Steve grimaced. “Same screwy hide-and-seek backscatter indication we saw in transit.”

Nobbots didn’t let his attention stray from the radar tank. Both he and Steve had strapped on holstered laser weapons. “Keep watching,” advised Paul. “Comes and goes.”

We studied the featureless display, and worried. The blip suddenly made a ghostly appearance. The pilot twiddled the imaging radar display controls. After another in-and-out appearance, the bogie solidified into a tangible object

“Whups!” Steve straightened. “Error’s mine; it isn’t Stinky’s big cigar. This ship’s a huge ball, and . . . Jaysus-my-beads! Huge is a ‘huge’ understatement. Damn thing looks to be half the size of Ceres.”

There was no momentary wave of vertigo like that which had accompanied the sudden appearance of Stinky’s cigar. Sensing that we were no longer alone, my skin crawled. I whipped myself around, heard a “voice” speak in my head.

Dr. Shore, we meet again.

The “voice” belonged to Mr. Smith, except it registered with an additional degree of resonance than I remember “hearing” in Earth-Luna, or again out in Galileo, and learned why he had worn dark glasses during those prior visits. His eyes were enormous, vividly yellowish, and feline, with vertical, dark-slitted pupils beneath high, flaring brow ridges. The full-length robe Cascading from abnormally wide shoulders, his full-length robe was alive with opalescent pastels that scampered across the garment’s folds in ripples and waves forming random patterns, an effect that was never quite the same. His “hair” was not hair, but a nest of tubers — thick, brownish strands growing outward in all directions helter-skelter. What with his treetop-tall stature, those fantastic cat’s eyes and the swirling Technicolor robe, Mr. Smith was a figure of imperious majesty.

“M-Mister Smith,” I stammered half-wittedly, returning his greeting. For some reason, I had difficulty enunciating properly, and it bothered me.

The need for identity charades no longer obtains. You may address me as Llogaar, if that is your pleasure. Think of it as a less than perfect phonetic transliteration of my true calling.

I tried to think of something meaningful to say, but whatever had been on the tip of my tongue didn’t come out quite as it should have. Struggling to speak clearly, I did my best to introduce Alexis, Paul and the pilot, and managed to do so more or less by default. The speech problem began to worry me. I chalked it up to acute nervousness.

As if anxious to dispense with the amenities, Llogaar was barely cordial in manner as he curtly announced the reason for his visit. *My friends, I must alert you of grave and imminent danger. You must flee this place immediately.*

Valid warning or not, I could see how fiercely it ruffled Paul’s feathers, and the pilot also stiffened, letting two fingers rested lightly on the butt of his holstered laser weapon.

Sounding more calm than he probably felt, Paul asked Llogaar point-blank if he was responsible for the outbreak of supposed mental illness among us.

While aware of what has taken place, the onus is not mine. It is precisely why I have burst in on you like this. You must flee this planetoid with due haste. It is imperative that you do so at once, and not delay.

“Did Stinky send you?” Wound to hair-trigger tautness, the pilot was like a tightly coiled spring teetering on the edge of release.

An expression of transient puzzlement crossed Llogaar’s gaunt, unevenly splotched features. *Your meaning eluded me momentarily, young sir. By no means could Stinky, as you*

choose to call the unit, dispatch me. Yet the pseudonym you have chosen for the unit in question is somewhat apt, in more ways than you can begin to imagine.

“What do you want of us?” asked Alexis.

Only to warn you, and urge you to take heed of a clear and present danger, declared Llogaar. Every individual within this complex is in serious jeopardy. Each second you remain resident on this minor body increases the jeopardy tenfold, as well as the inevitable dire consequences. Please appreciate the imperative nature of my caveat, and flee.

“Afraid it can’t be that simple.” Nobbots sounded determined. “We require facts, not ex cathedra warnings. Who are you? Where are you from? And aside from wishing us to depart from Ceres what do you want of us?”

My identity and provenance are non-germane, and have naught to do with the present issue. As you have naturally deduced, I dwell in another part of our common universe, nor do I give away anything of importance by confirming the validity of your presumed deduction. To respond directly to your queries, however, is not possible. Doing so would violate an oath which cannot be taken lightly, nor in the manner demonstrated by the single unit of the composite entity you refer to as Stinky. In this singular instance I must therefore plead for your trust and confidence, and in my plea I hope to employ every iota of persuasive power to assure you that your own best interests demand precipitous haste. Flee while there is still time. Flee!

Alexis began to frame another question, but Llogaar preempted her.

No further queries, please. You must depart this minor body now, now, now! To tarry even briefly as your kind reckons time’s passage would leave you utterly defenseless, doubly and extremely vulnerable. The vital importance of my warning cannot be overstressed. Should you fail to act now, now, now, you will soon . . .

The uninflected telepathic voice abruptly ceased. Llogaar’s overly large head slowly turned, and I became semi-hypnotized by the magnetic force of those vivid feline eyes. His question came through the haze that seemed to have enveloped me. *Dr. Shore, are you unwell?*

I did not feel unwell, nor did I feel well. I felt lethargic, light-headed. I tried to explain the feeling, tried to tell everyone how it was, but my throat seemed paralyzed. For some reason I had lost the ability to articulate sounds, form words.

Then a strange voice that sounded vaguely familiar began babbling. The speaker, whoever and wherever he was, claimed to be reincarnated Thales of Miletus, one of ancient Greece’s Seven Wise Men many consider the Father of Science. I knew whoever believed himself to be Thales had predicted the eclipse that cut short the famous battle between the Medes and Lydians, and likewise who had rebutted Aristotle’s slanderous canard, accusing him of citing the Earth as floating on water.

The confused babble continued unabated, mystifying me. I tried to locate the speaker and managed to intercept Alexis’s horror-filled stare just before she screamed. I wanted desperately to go to her, to comfort her. But it was as if I was locked in place, inert, my nervous system no longer responsive, no longer a functioning part of me. I was no longer in control of my own speech, and even worse had lost the ability to move of my own volition. A strangling sensation crept through me, a sense of being confined, trapped and held prisoner within myself. I desperately tried again and again to say something, and gave it up as hopeless.

Steve and Nobotts came as one and took me firmly by either arm. I felt the pressure, saw things clearly, yet the scene was degraded to the point of being semi-surreal, dreamlike, as though viewed by someone else.

Gradually, with mounting terror that opened like a bottomless abyss yawning to swallow me up, I realized where the babblings had originated.

The strange yet somehow familiar voice was my own.

Nine - In Vino Veritas

Want to know all there is to know about schizophrenia? Ask, and I'll be happy to tell you. I've no inkling whether my case was typical, atypical, ordinary, extraordinary, or slipped into a halfway-between crack south, north, east or west of the twilight zone. Judging from the background details Alexis furnished later, I missed out on the genuine nightmare. Except in the foggiest, most desultory way I was too pumped full of tranquilizers to appreciate what came down in Ceres, and afterward.

Far from being the only victim of mental illness tsunami that cut short our sojourn in the asteroid belt, I was told three other men, plus one of the wives, had been also taken to beleaguered Dr. Salmo's infirmary. By that time the poor medic must have been a good distance past his wit's end. No, strike that lousy figure of speech; it's in bad taste, too. Under the circumstances generated at the time of my breakdown, Dr. Salmo himself began to act and talk erratically, eventually becoming one of his own patients.

To belabor the obvious, Salmo's breakdown was of course the camel-smashing straw. Alexis, Nobotts and Casey held a quick, short council of war, toted the fearsome odds stacked against them, and were able to conceive of no weapon capable of fighting an intangible aggressor, hence the ensuing decision was unanimous. Adopting Llogaar's counsel as the sole out, their joint order to pull up stakes in Ceres was eagerly accepted.

Yet a serious hitch scotched such precipitous action: there was no reasonable way to slam the base's main airlock shut, board ship and boost away from the Demeter installation, not with a herd of panicky people tearing about, demanding to be saved by the remaining cooler, "normal" heads, who busied themselves feverishly, simultaneously trying to accomplish a doz-dozen varied tasks. The fusion tokamak had to be shut down, but not until the eve of departure, the very last act prior to lift-off. Foodstuffs and stores for fifty-six people, plus the people, had to be crammed aboard ship, a circumstance that made a dilemma of powering-down the fusion tokamak. Depowering the base meant our huge stock of freeze-dried and deep-frozen perishables would perish, the greenhouse crops would freeze, shrivel and die. Minus utilities, the free air inside the facility would condense and deposit a layer of rime frost over everything when the temperature plummeted down toward zero absolute. But it was Casey Chew who uttered a vociferous warning, flatly declaiming that they dare not leave the tokamak powered and unattended.

All told, slightly less than fifty hours of furious, round-the-clock activity was required to "kill" Demeter's base. By then seven additional specialists, engineers, technicians and riggers et cetera had developed pronounced schizophrenic symptoms, with Alexis and Casey joining the now doctorless patients, including yours truly.

When first attempting to deal with the critical situation, Dr. Salmo had wisely kept a log of patients and dosages. Nobbots extrapolated from the medical records Salmo had on file for the original patients he had treated before falling ill himself. Paul managed to keep us sickies sedated and orderly most of the time while the base underwent the shutdown frenzy, and later when no one not aboard at the time could begin to imagine the varieties of hell each and every more or less “sane” survivor experienced during the hectic months of sunward transit.

Even so, the situation turned into a nightmare ten times more difficult to sustain when the medication ran out shortly after Steve turned ship arse-end-to, and we began the weeks needed to back down under deceleration boost toward the Earth-Luna system. No facilities for our care existed in Earth-Luna Station, so Nobbots wisely decided to insert the ship in a lunar parking orbit and shuttle the patients down to the medicenter in sublevel Sinus Iridum.

The fourteen days under deceleration were a waking delirium for our keepers. No new cases developed in trajectory, a fact which reinforced pointing finger of blame squarely at Stinky the Spice Monster and its postulated otherworldly associates.

Much later the notion of having been subjected to the flowering of Stinky’s “seeds of your own destruction” burned me raw inside myself. I became internally frantic at the thought of that interstellar eyesore using its “superior” accomplishments to shoot down in flames our chance for success. It made me hot in a way that went off the scale. I was hacked through and through, not only because of what had been done to us in Ceres, but due to what Stinky had done to me personally, a *very* personal thing, believe me. Trapped in a non-functioning body, I was eaten by the sort of icy fury that makes the peaceable hero of a Wild West holodrama belt on his six-guns and call out the worst, nastiest black hats in the whole rowdy saloonful. I lived inside myself, burning with a fierce urge to turn Stinky into dog meat. I wanted it in the worst way, an exalted ambition indeed for someone unable to walk or talk of his own free will.

The unhealthy killing urge stayed bottled up inside the real “me,” isolated in some way inside a stranger who also, at least in a way, was sort of me, or maybe had once been me. During that horrific, homeward-bound transit I was powerless to learn the score from Steve or Paul when they came to feed me, take me to the john, clean me up or boost me into a foldbunk and fasten the restraint harness, a useless precaution since none of us “patients” could have left the bunk on their own. All thorough that miserable period I was fully conscious, fully aware inside myself, which made it truly frustrating, more so than any other variety frustration on record.

I desperately wanted to thank Paul. I was dying inside to ask him how things were going, to encourage him because he looked like he could use every syllable of pep talk anyone could muster. Yet I remained totally “musterless.” All I heard coming out of “my” mouth was a string of mumbo-jumbo foolishness, non-sequiturs and sheer blathering nonsense. I knew that if something didn’t change fairly soon I would probably be a permanent candidate for the laughing academy, exactly as Stinky must have intended.

During that madhouse trajectory they kept me and the other lunatics in our foldbunks most of the time, with the restraint webbings fastened under the bunks us so we couldn’t reach the latches and turn ourselves loose, which none of us could’ve probably done anyhow. Picture for yourself the effect of lying awake hour after hour, shipboard day after day, your mind free and clear inside the prison of your skull, staring at the overhead of the foldbunk above you, alternately crying and laughing inside yourself. I spent many of those day-long hours fantasizing

heroic feats of derring-do wherein I slew ugly monstrosities from the stars in horribly protracted, gruesome and agonized ways.

Although I had no notion where we were going, or *why* we were going anywhere, us “patients” finally arrived at the medicenter, ironically located in Sinus Iridum, the sublunar anthill community where Alexis maintained a home away from home adjacent to the lab where her father had worked his nuclear fusion miracles. The medicenter staff medics must have been overjoyed to have more than a dozen raving nuts all at once dumped in their laps.

The most shadowy, least worthwhile period of my life ensued, lasting for weeks or months — how long a time I had no way of judging then. Singly and in pairs, triplets and quads, doctors in neat white medical smocks gathered and asked how I felt about this or that. My answers occasionally caused them to try and hide their grins, but the inner “me” was not the least bit amused by their amusement. My lucid inner self fell into the habit of tuning out the noxious maunderings of the avatar, doppelgänger, whatever and whoever the stranger was who’d taken control and insisted on fronting for the real me. I heard my other self idiotically proclaim that I was Edwin Hubble, and then effervesce profound cosmological theories of maddeningly low interest to the “me” Stinky the Spice Monster had somehow caused to be abandoned inside an unserviceable body. I was Copernicus, I was Sandage, I was Einstein or Penrose or Hawking, I forget which. I was all of the above.

I was crazy!

My cosmological dissertations never failed to thrill the doctors; I could tell by their long faces and bored expressions. Even as a youngster I’d an unusual degree of interest in the history of astronomy, and somehow or other, in some strange way, that indecent, double-ugly telepathic slug from the stars had known *exactly* which buttons it needed to push in order to tweak my subconscious, unconscious, supra-conscious or whatever inner self. Who knows? Maybe the smelly, liverish bastard had done nothing more than energize some psionic device and order its ultra-sophisticated technology to have its way with me.

One fine morning in the midst of a daydreaming vendetta, while I was gleefully feeding Stinky millimeter by millimeter into a huge meat tenderizer, a hulking male nurse came into the ward, collected me by grabbing my arm and none too gently steered me down a corridor to the visitor’s gallery, where Galileo’s Director John Mattingly came to his feet when I appeared.

Looking haggard, Sir John nevertheless did his best to put on a cheery face. “Hullo, Shore. I say, you’re looking first rate, simply splendid!”

I tried desperately to voice a greeting, to pump his hand. Instead, I heard myself describe myself as H’sien, astronomer royal at the court of the Sung Emperor, who had just discovered a new “guest star” in the constellation Taurus so dazzlingly brilliant it outshone Planet Venus, and would soon grow more luminous than any other star in the galaxy.

He kindly ignored the outburst, but the sorrow in his eyes was a dead giveaway. “Yes, quite so, quite so,” he said more to reassure himself than for any other reason. “Is there anything I can get for you, Roger? Anything at all?” I proved myself unable to respond, and he added, “I do hope you understand that absolutely no expense is being spared to obtain the very best treatment available for you and the other, er . . . unfortunates. We shall have you back on your feet in no time. You may consider that my solemn promise.”

Struggling to frame a question, I would have given anything for the ability to ask about Alexis, or beg to hear how the Raja was doing. All that came out of the avatar's mouth were jabbered astronomical banalities.

Head bowed, outwardly dispirited, Sir John said his goodbyes and left after a few more words of comfort. A different hulking male nurse conducted me back to the special day room where we restricted patients were allowed to mill about aimlessly without escort, or play backgammon and checkers if we were capable of managing such involved intellectual processes while being strictly kept away from anything sharp or pointed.

* * *

Not many days later, or possibly quite a few — I lacked a frame of reference needed to judge — a team of three doctors foregathered and performed yet another series of extensive examinations to which I had no possible way of objecting. A full set of new EEG traces were analyzed, and meticulously compared to those previously obtained. A succession of CAT scans or something similar were reviewed and discussed and reflected upon. My nonexistent reflexes were checked, rechecked, re-rechecked, and I was blinded by a parade of ophthalmoscopes beaming bright lights in a vain search for my soul through the windows of my irises. During the lengthy session I unwittingly glimpsed the log in which a psychiatrist had jotting entries. The snatch I saw briefly and managed to read was: "Penultimate diagnosis: acute schizophrenia, prognosis indeterminate. Patient poses no apparent danger to himself or others. Recommend medication schedules 4, 11 & 17, Therapy IIIB, and freedom of the ward."

One positive thing was able to say for the "penultimate" diagnosis: it unchained me in a manner of speaking. I was turned loose in the medicenter's psychiatric ward, with permission to saunter in the mild lunar gravity, if saunter is an applicable term, on a walkway bordering an artificial emerald lawn beneath an artificial blue sky, and smell the artfully positioned sprays and bouquets of artificial flowers blooming on artificial shrubs. Having been seated on a bench by another member of the hospital's hulking male nurse corps, no more than ten or fifteen minutes passed before I spotted Casey Chew and the Raja, although recognizing Jeff was difficult; only twice before had I ever seen him doing a "raghead" imitation. My colleagues and fellow sufferers were also seated here and there on benches where the attendants had left there. Like my very own avatar, they watched the passing ambulatory parade with expressionless, unseeing apathy.

I tried to get up and walk myself in their direction, but my obstinate legs refused to heed the command. A half-dozen women patients in drab gray smocks also passed past my bench, yet Alexis wasn't among them, a fact encouraging the inner me to think she'd remained unafflicted. I sat there like a zombie until a stumpy, florid-faced man came over, sat down beside me and said in friendly fashion, "Hiya, Pal. Would y'like to go for a stroll, huh?"

I heard myself beg off, explaining that I was American astronomer Harlow Shapley just returned from Bloemfontein in South Africa with the astounding revelation that more numerous galaxies existed in the universe than the billions of stars in our own Milky Way. My avatar thoughtfully went on to explain in detail that making full use of my powers of concentration also demanded solitude.

"Y'don't say?" The astronomical disclosure left my would-be benefactor nonplused. "Henry's the name, Pal. Come on, heist your butt off the bench and we'll kind of stroll around

some, see the sights. The crum-bum orderlies working here don't like to see us goons just sitting around gawking."

Henry pulled me to my feet and, since I was powerless to resist, led me around the ward, making the me within feel like a poodle on a leash. A born conversationalist, the fact that his monologue elicited zero in the way of responses didn't faze Henry in any way, nor retard his outpouring of cheery babble. Henry Ogilvie, a retired spaceman, told me he'd spent twenty-four years with *GrossEuropa Raumschiff*, mostly aboard ship in deep space, or based at the spacecraft terminal in Luna's Sea of Tranquillity. Like many another spaceman, Henry confessed to having sought bottled cheer and comfort during the long, lonely watches between ports of call. In the old days, he informed me, no one had objected, then space had changed. Newly ratified rules and regulations demanded strict sobriety in trajectory, with no compromises permitted, no exceptions allowed despite whatever high or low status a veteran spacehand might happen to enjoy.

Henry's life story continuing unabated, without stops. He revealed that on three separate occasions GER GmbH had dispatched him to a drying-out session in one subsidized rehab facility or another, but had finally given up and thrown in the towel. He'd been cashiered sans pension, sans severance pay, sans any financial parachute, not even so much as a goodbye handshake. At which point his younger brother, a licensed member of the powerful Astrogator's Guild, had stepped in and taken up Henry's cause with a vengeance. Although his older brother was not a member, the professional organization's squadron of legal eagles had flown to his aid in a tight formation, determined to make a test case of his summary dismissal. A lengthy court hassle had ensued, culminating in a three-way agreement negotiated between the Astrogators, the insurers who underwrote GER health, accident and hazard policies, and corporate *GrossEuropa Raumschiff, Gesellschaft mit beschränkter Haftung*. Henry had been officially declared a victim of space, not merely some ordinary off-the-shelf alcoholic, and committed to Sinus Iridum facility as incurable, with the insurers, Astrogators and GER splitting the stiff fees. Afterward, as such things now and then do happen, everyone except Henry's savior of a brother had forgotten about him.

The me locked inside a non-functional human shell absorbed Henry's saga with zero enthusiasm, but if ever there was a captive audience I certainly filled the bill. Henry bunked across the hall and four doors down the corridor from the two-bed ward I shared with an elderly gentleman who spent hours staring accusatively at the wall, and never acknowledged the existence of any other human being, including me. A daily walk, and strictly one-sided talk with Henry, became the highlights of my day-to-day existence, such as it was. Left to my own devices, without any devices available, from time to time caused the real "me" to all but careen round the bend. There was nothing to occupy my mind except for engineering ingenious methods of slaughtering Stinky the Spice Monster, or mooning about Alexis and Demeter's broken starflight dream, or my own lost self.

One morning Henry showed up as usual, except he was acting extra-agitated. There was no monologue like the tales of triumph and tragedy I had grown accustomed to hearing, a real surprise because he dearly loved to relate his spaceside adventures among the carbon dioxide-breathing, Mars-rationalized colonists — "Marsrats, they call themselves," he told me with a chuckle. Normally Henry loved to tell lascivious tales about chasing the free-swinging

stewardettes who liked to live it up during their layover times in Mars, or in one of Jupiter's far-flung moons, or elsewhere.

Antsy though he was that morning, Henry finally confided a tidbit of information: "My brother's coming t'see me tomorrow. Jeez! I sure hope he don't forget to bring the joy juice mix. What the hell am I gonna do if he forgets?"

I had no idea what he was talking about, nor did I learn until later whether his astrogator brother had remembered to bring the "joy juice mix" he wasn't supposed to forget. That night my roommate died in his sleep. His passing created an early morning stir when a nurse discovered there was no breath left in the old fellow. She got me dressed, hustled me out of the room at quick march just as a pair of orderlies rolled in a gurney to cart away my former roommate.

Henry showed up later in the recreation area acting double-plus animated. He walked me around the ward promenade as if we were in a race, and talked a flood of talk, chattering about what a great guy his younger brother was, and how his bro had never let him down, nor would he ever, neither as boys growing up or anytime since. Henry said he'd heard through the grapevine about my roommate going to his reward, so he knew I'd be alone in the room for a spell. He looked at me and winked slyly, saying he planned to drop by in late evening and maybe cheer me up some, hinting about a little party we'd have if the night nurse was looking the other way.

I was given my injections and medications per the medics' standing orders, put to bed by the numbers, and I suppose I slept. Henry woke me by shaking me and whispering like some slurred-speech conspirator while waving a plastic hot water bottle back and forth like a trophy. "Got it right here, Pal!" he whispered. "My bro came through like I damn sure knew he would. C'mon, sit up and have a snort. It really ain't so awful long as you hold you nose." He put a hand behind my neck, levitated me and shoved the hot water bottle with the cap unscrewed in my face.

It was either swallow, or choke. I swallowed, and gagged. Henry's revered brother had smuggled some powdered flavoring into the medicenter. Henry told me he'd swiped a bottle of alcohol from the lab with a little help from a paid-off orderly. The powder, mixed with ethanol and cut with water — a miserly amount — tasted a tiny bit like homemade whiskey.

A teentsy, *tiny*, miserly bit.

As a gargle, it wasn't what anyone would be brave enough to call smooth, but I'll bet worse has been tasted. Barring the danger of going blind if Henry had chanced to swipe the wrong kind of alcohol, I could've learned to like the stuff.

"C'mon, have another blast, Pal?" invited Henry. "Drink up; it's good for what ails ya."

Henry was right, although he had no way of knowing why. Minutes later, I felt myself come to life. I could suddenly will movement, mouth a few halting, sensible words. "Th-thanks, Henry. You've . . . saved my life."

He was so startled to hear me say something reasonably sane it made him drop the hot water bottle, though he was able to snatch it back in midair during its slow fall in mild lunar gravity, and not spill a drop. Studying me closely, he whispered, "Hey, that's the ticket, Pal. Don't know what the hell's turned your head on, except t'say my joy juice must agree with you. Here, drink up."

I needed no urging. In five minutes, the storm clouds had parted all the way, and the sun shone through brightly — a truly glorious, utterly unexpected happenstance. I had retrieved the

ownership of myself. I was intact again, whole and complete. I've been super-elated at one time or another in my life, but never like I was at that moment, not before or since.

Slipping out of bed without help, I opened the door a crack, peered around the jamb and listened. The corridor, night-lighted dimly by wall sconces, was still and deserted. Even half-seas over, my sudden change from vegetable or mineral to animal had disconcerted Henry. Sinking down on the edge of my late roommate's unmade bed, he was eyeing me with deep suspicion. It was nearly impossible for him to believe the answer to my problem lay in ersatz hootch, but neither of us could think of any any other reason.

I took another drink.

"Jeez! You sure got t'feelin' one helluva lot better real fast, Pal."

"Henry," I said, "you don't know the half of it. My name's Shore, Roger Shore. Someday, God willing, I'm going to find a way to repay you for what you've done. I mean to square accounts with you if it's the last thing I ever do."

"Hah!" Henry shrugged. "Don't mention it, Rog. Here, have another gargle." He passed me the magic hot water bottle.

I did. Soon's I handed it back to him, I began making feverish plans. But when I outlined what I had in mind, Henry, he shook his head with negative solemnity. "That'd be a first-order mistake, Rog. Never, ever, tell the shrinks anything. Nothing, not one word! It's them against us, see? If you really 'n truly all of a sudden got your head screwed on tight again, keep a real low profile. Let the witchdoctors think *they* came up with a miracle cure, not you on your own. Hear what I'm saying? Take it from an old-timer who's been playing this game for a passel of years. It's the onliest way there is to make sure it all works out. Trust me!"

Between us, we killed the hot water bottle in short order. Henry shook my hand, patted me on the back like we'd been best friends since infancy, and slipped out of the ward like a rubber-legged phantom. I lay awake most of what was left of the night, more than half-crocked from sampling Henry's ersatz firewater, wildly scheming in the darkness. Somehow I had to communicate the curative powers of ethanol to Sir John, Nobotts, *anyone* from the Demeter crew who would listen. But I also appreciated Henry's counsel. I did seem smarter to pretend I was responding to treatment than mentioning how I'd cadged a dram or two of ersatz hootch. Maybe I could even find a way to dole out hi-octane booze to Casey, Das, the others locked up in the Sinus Iridum looney bin. The discouraging thing about adopting that course of action was its snail-paced maturation rate. On the other hand, I could also try sneaking a note detailing the method of deliverance to Sir John the next time he looked in on me and very likely the other Demeter patients. I decided to think about, and make up my mind it in the morning.

I awoke, dismayed and totally frantic, as before finding myself the same disgusting helpless, hapless, hopeless yet internally reasoning vegetable. I sobbed without shedding tears, sobbed inside myself, overwhelmed with self-pity at the rotten hand I'd again been dealt.

I felt terribly frustrated and alone, lost inside myself.

Lost!

* * *

Later, bleary-eyed and untalkative, Henry Ogilvie took me for a stroll around the recreation promenade. Succumbing to what I judged to be a major hangover, he no longer seemed curious about why I'd suddenly started walking and talking on my own, or why I'd

lapsed back into life as an apathetic mannequin, although he went so far as to mention having supported my on-again, off-again recovery, not to mention regret over my return to drastic backsliding if only in a semi-sincere way. I suppose he was too preoccupied with his own morning-after miseries to exercise a proper degree of sympathy.

“Hope to God,” he grumbled, “you aren’t feeling as low-down as me, Rog.”

We sashayed round and round, making circuit after circuit of the isolation ward’s carousel of misery or apathy, take your pick. “Rog,” Henry said, sounding philosophic, “We both prob’ly need a tuft of hair of the dog that bit us. I sure as hell need it in the worst way. Tell you what: I’ll try ’n sneak back to your room again tonight, okay?”

He did show up, but found me already asleep. This time, not much more than a whiff of the screw-in hot water bottle cap was enough to part way glue me back together. Soon as I left lethargy most of the way behind me, I attacked the subject uppermost in my mind. “Henry, is there any way you know of to smuggle a note out of here?”

“Oh, sure; do it all the time. I send a letter to my brother reg’lar as clockwork. Not e-mail, mind you; the hospital computer’s off limits for patients, guarded pretty close, it is.”

“No, not that way. I’d like to send out a handwritten note.” I had no clue how it might be accomplished, since the outgoing mail of all patients was routinely scrutinized, recorded and passed along to the medics for analysis. “Can you get a note out through your brother?” I asked eagerly.

“Not really . . . Well, yeah; I could, but we’d have a few months’ wait, or longer, t’get an answer. My bro’s shipping out right soon now. Wait, no need for that, anyhow. Got a buddy who works in the mail room. His head’s screwed on tighter ’n most of the fatheaded witchdoctors, yet he says he likes it here. Don’t ask me why.”

I explained what I wanted to do, stressing the need for secrecy more than speed.

“No sweat, Rog. Tomorrow night soon enough?”

“Um, might be a little late. I think they’ll be moving another patient into my room.”

“Uh-huh, gotcha. Have anything to write with?”

“No, unless there’s paper, pen or pencil in the bureau over there.”

“Uh-uh, no such luck,” said Henry. “Day room’s the only place they let us have anything sharper than a bun, like soft crayons. Wait, I’ve got a pencil stub I hid in my room. Paper’s easy. We can rip a sheet out of the Bible? There’s one planted in every room.”

“An old-fashioned *print* Bible? I didn’t know any were left except in museums.”

“No sweat. The Gideons still shovel ‘em out wholesale.”

My impassioned plea for aid and assistance went out written around the margins of pages torn from Chapter 9, Deuteronomy, courtesy of the Gideon Society.

The next day Henry let me know an envelope replete with the medicenter letterhead had gone out addressed to Galileo Observatory Director J. Mattingly, care of Earth-Luna Station general delivery.

Ten - Salvation According to Scripture

On the same day Henry whispered to me word that my note had been dispatched and was on its way, an attendant escorted me back from a meaningless therapy session and I learned a

querulous, middle-aged man had been installed in what for days had been my private room. After one oblique glance in my direction, the newcomer decided I was an agent for Them, whoever “Them” might happen to be. Certain I had been put there expressly to spy on him, he made a production of surrounding himself with heaped bedding to keep his activities safe from my prying eyes. The activities he indulged in were juvenile, and a touch unsanitary truth be told. The term “Making yourself at home” is commonly used to describe what he was doing, so I was happy to see him take precautions against my espionage tactics. On the minus side, my new roomie’s arrival brought about a hiatus in our boozy midnight revels. That must have made Henry feel better; I’d been making serious inroads on his limited supply of ersatz firewater.

The succeeding days dragged past unmarked by major, minor characteristics or other milestones. Henry dutifully walked me, talked me, and began to turn grumpy as his supply of flavored ethanol ran out. He explained how he’d tried drinking straight alky from the lab, and assured me it would gag a maggot. With his brother in trajectory somewhere off world, it was for Henry a period of severe trial fraught with severe trauma.

A disinterested male orderly walking me back from the dining hall one evening suddenly took his hand from my arm and abandoned me upon hearing shouts that indicated some kind of ruckus in a nearby room. I found out later an adroit patient had successfully hung himself by knotting together several pairs of socks and a twisted shirt, then tying the makeshift noose around an overhead fire-safety sprinkler head. Hanging yourself is no simple task under Luna’s mild gravity; it’s more like slow strangulation I’ve been told.

I stood where the attendant had left me unattended, locked within myself, unable to move. Henry came ambling down the corridor clutching the hot water bottle to his gut. My recently installed conspiracy-theorist roommate had been taken elsewhere temporarily, so when Henry ushered me into the room we had the place to ourselves. Leading me into a corner slightly screened from the door, he held out the hot water bottle. I drank deeply, saturating my bloodstream with alcohol as fast as possible. It quickly unchained the inner me.

“Henry,” I pleaded, “for God’s sake show me how to bust out of this hellhole. I can’t take much more. If I don’t get out soon I’ll become a permanent resident in this bughouse.”

“Easy does it, Rog. Forget about scarpering on your own.” Saying it made him look sad. “You don’t have a clear picture of where you are, see, or how it works here? Crash out, and they’ll have you back inside before you can do a finger snap. There isn’t any place to hide in the Bay of Rainbows. They’d run you to ground quicker ‘n scat by sealing off one level of the anthill at a time, then post guards ‘n have ‘em run a fine-tooth comb through every level.”

I had just begun a futile argument when the nursing supervisor popped inside without either of us noticing the intrusion. She ogled us for a few seconds, then demanded to know what we were doing.

Henry instantly slipped into his automatic pilot act, adopting his patented “know nothing, say nothing, but always be kind to nurses” routine. I shut up and played dumb, too. But the supervisor, a hefty mama-san with an undersized brain, but the forearms and biceps of a full grown male gorilla, had overheard us talking together. She jerked up one forefinger, aimed it at my nose. “Shore was jabbering just now,” she accused, leaning aggressively toward Henry. “How does he all of a sudden start talking, maybe even making sense?”

Henry fell back on a standardized snow job in his repertory, claiming he'd seen how upset I was over the suicide down the hall and was trying to comfort me. The nursing supervisor was far too ward-wise to buy that brand of hokum. "Don't hand me that crap, Ogilvie. Exactly what do we have here?" She demanded, wrenching the hot water bottle out of Henry's grasp. She uncapped it, and sniffed. "Well, for the love of . . .!"

Charging into the corridor, the incriminating evidence in her chubby right hand, the supervisor rang for the doctor on call. Henry was led away sobbing. An orderly walked me to a consulting room networked to the medicenter database, where I underwent an interrogation by a sour-faced, stoop-shouldered psychiatrist who brought up my records on a flat-screen display, studied them for a minute in silence, then favored me with a professional leer. "Tell me, Shore. When did you start feeling well enough to converse with another patient?"

With Henry's caveat ringing in my mind, I debated with myself about clamming up, then gave up instead and gave in to an impulse. "Right after I took a drink, Doctor. It's happened before. Alcohol seems to release whatever's been holding me prisoner."

"Ah, holding you prisoner. Yes, I understand." Stolidly sympathetic, his 'understanding' extended only far enough to judge that I was babbling. If I had expected an argument about the analgesic effects of ethanol, he grossly disappointed me. "Why not tell me all about it?"

Like a damn fool, that's *exactly* what I did, explaining my acquaintance with Henry, relating our nighttime tipling, the magical way my head had cleared after only a few belts, how it allowed me to walk and talk normally for a time.

"Of course, of course." The doctor nodded sagaciously, and used a few soft-spoken words to make notes via the computer terminal. "You mentioned being held prisoner. Were you able to identify who or what has been holding you prisoner?"

After taking my doctorate, I had stayed on at the university for six quarters as an associate astronomy professor. Certain I could be every millimeter as coolly professional as any of the shrinks I'd seen in action, I described my background in a scholarly, understated manner.

"We are fully aware of your credentials, Dr. Shore. Remember, we're here to help resolve your problems, not to make things more difficult. Feel free to discuss whatever comes to mind."

And like a naive ten-year-old I opened up, mostly I think because ever since the mass psychosis onslaught in Ceres he was only the second human being to whom I'd been able to unburden myself. All things considered, that amounted to a lousy excuse for my lapse of reason when dealing with a psychiatrist. Keeping Demeter and my companions in misery out of it, I insisted that my "condition" had been artificially induced, in fact proactively caused by an extraterrestrial alien creature, and explained to the shrink the afflictions affecting me and my companions were the result of an extremely important program being sabotaged by this same sadistic creature from the stars.

Outwardly nonplused, the doctor acted as if he had accepted my astounding revelation with total equanimity. He dictated some additional notes to the computer database.

During our most recent encounter ended in disaster, I'd partaken of only one strong belt of Henry's joy juice before the nurse caught us, so my ability to speak freely began ebbing. The result was maddening. I tried to talk faster, hoping to impress the psychiatrist with the fact that another drink was vital if he wanted to hear the rest of my explanation, but everything went to hell faster than I thought possible. Soon the other "me" started babbling astronomical nonsense.

The doctor commanded a privacy screen to lower. He dictated unknown comments to the computer's medical database, now and then pausing to glance at me with owl-eyed fixity to make sure I stayed where I was.

After that session they moved me to isolation in a locked ward, and kept me under constant surveillance. It made everything that had happened seem a whole lot worse than it actually was.

* * *

I was fed, cared for physically, injected and forced to swallow medication. Time passed, how many hours or days I had no way of estimating. By then I had arrived at the brink of a precipice, and there below lay a bottomless dark abyss where what was done to me, or not done, no longer mattered in the least. The real "me" was teetering, with both big toes over the edge.

Yet someone continued to pay, and pay plenty for my treatment. I underwent group therapy sessions in which I participated by sitting there like a statue and making occasional inane cosmological comments. Doctors saw me at irregular intervals I had no metric with which to judge. I was counseled, encouraged, probed, sampled, thumped, prodded, injected, re-injected and set back on the isolation shelf until the next psycho séance. Most medics and nurses who dealt with me were circumspect about what they said in my presence, though now and then I overheard snatches of conversation and remarks that were not intended for my ears.

"Hear Chamberlain's coming to consult on this case," remarked a psychiatrist at the conclusion of yet another nonproductive session with me.

"Really?" Obviously impressed, his colleague said, "*The Chamberlain*?"

"Himself," assured the shrink. "Shore, here, must be a good deal more important than meets the eye."

"Ever catch one of Chamberlain's lectures?"

"No, never. He was before my time, although his reputation survives. Keeps to himself, they say. Lives in Xanadu — la-de-dah! — and dispenses infinite wisdom from the sky."

His colleague nodded. "Infinite wisdom listened to very closely, I would say."

At the mention of Xanadu, the "me" trapped inside myself perked up momentarily.

Not long after that fruitless session, according to my faulty means of reckoning time's passage, the arrival of Dr. Chamberlain and his assistant created a genuine medicenter flurry. I was conducted to a consultation room near the visitors' gallery, where the famed psychiatrist proved to be a wizened, sharp-eyed, sharp-tongued gnome of seventy-some summers.

My first glimpse of his "assistant" shocked me to the core. None other than Paul Nobbots smiled at me warmly, nearly causing my heart to try and jump right through my sternum.

"We shall want a few moments alone with the patient," announced Dr. Chamberlain crisply. "Please excuse us if you will be so kind."

It was difficult to tell whether the chief physician or the medicenter administrator were most disappointed in the small group of gawking medics. Nevertheless, they and the male orderly who had escorted left the room without comment. Through the closing door, I saw a half-dozen others who had gathered for a peek at the legendary Dr. Chamberlain.

After the door slid into the wall Paul Nobbots withdrew a half-liter flask from his inside jacket pocket, uncapped it and held it to my lips. I gratefully swallowed several mouthfuls of excellent Kentucky sour mash. In not very many minutes it set me free.

“God in . . . Heaven! Thanks, Paul. You look great.”

“I reciprocate one thousand percent, Roger.” Nobbots smiled again, and squeezed my shoulder with one ham-like hand.

“Amazing!” Dr. Chamberlain’s tone was brusque, yet still somehow cordial. Not wasting an additional word, he said, “To business, Shore. Tell us all about your stay in the hospital. Take your time, jabber freely. Say whatever comes to mind, and hold nothing back. You talk and we shall listen.” He sat down, continuing to study me with fierce intensity.

I took a deep breath, pitched in and started to spiel like a carnival barker, the words tumbling cascade fashion, flowing in a torrent ejected by the back pressure of being too long pent. While I rattled on, Chamberlain took my pulse, then wound an old-fashioned, museum piece sphygmomanometer around my upper arm and checked my blood pressure. I remember Paul interrupting only once, his lips next to my left ear, by whispering that Chamberlain had been briefed, that he was privy to Demeter, letting me know it was acceptable to mention the alien visitations.

When at last I more or less ran dry, Dr. Chamberlain uttered a profound grunt, leaned backward rocking his chair on two legs while those shrewdly narrowed eyes drilled through me. “Roughly how long do the lucid periods persist, Shore?”

“Tough . . . to judge. Maybe an hour, sometimes less. I think they were getting longer and longer before Henry and I got nabbed by the nursing supervisor.”

“Henry . . . ? Ah, yes; the friend you made here in the hospital.” Chamberlain rocked his chair forward on all four legs. He built a pyramid with splayed knobby fingers, tapping the tips together in deep thought; I could almost see the wheels going around in his balding head.

“Nobbots,” he said at last, “it’s my snap judgment that your extraterrestrial acquaintance somehow induced a post-hypnotic trance, or something similar, among certain base personnel, including Dr. Shore. Who knows, perhaps ethanol releases whatever inhibitions were induced to create a deranged state in certain patients.”

Leaning forward, he spoke as if in confidence. “Listen to me closely, Shore. At this point you must understand that my reasoning relative to your condition is based upon pure guesswork. If I were to have you signed out, discharged to my personal care, would you consent to submit to a series of control tests? It will be vital for us to find a more practical release mechanism than ethanol, particularly one which obviates its side effects.”

“Doctor, I’ll be delighted to cooperate if it means springing the others from his asylum. But I warn you. Don’t hesitate for a second to take care of doing what you suggested.” I described in graphic detail the danger involved in leaving anyone cooped up in a state of living death longer than was absolutely necessary. “It might not be a bad idea to keep all of us on a rum ration while you search for a better solution.”

Chamberlain’s eyes narrowed reflectively. Then he nodded affirmatively. “An excellent suggestion, all things considered. Every one of the victims is apparently suffering unnecessarily, living in what must be a thoroughly inhuman nightmare. Without swift action on our part, we might easily risk losing those possessing weaker wills than yours, Shore, and succumbing to a lasting, more permanent form of psychosis. Far better,” he quipped, displaying a flash of mordant humor I would never have suspected coming from him, “to have them crocked than cracked, eh?” The elderly psychiatrist grinned at his own witticism.

Paul seemed reluctant to agree. "Springing them en masse may not be that simple, Doctor. I'll accept full responsibility for their care. Can you arrange for the immediate release of all the designated patients?"

"And Henry, too," I put in.

"What did you say, Roger?"

"Let's not forget about Henry Ogilvie," I insisted. "If it were not for him, I wouldn't be here, and neither would either of you. If not for Henry, all of us might've spent the rest of our lives trying to peel shadows off the walls."

No sensible individual would ever consider Paul Nobbots to be other than the very best of the good guys. At first hearing, however, he was adamantly opposed to taking upon himself the responsibility for releasing a confirmed alcoholic who'd been judged incurable. Our waxing argument ended with devastating abruptness.

"Hold it, Nobotts!" Dr. Chamberlain sounded bent out of shape. "You're picking fly specks out of the pepper. After bailing out this fellow Ogilvie, feel free to brief him, shoot him, do with him whatever the hell else pleases you. I'm left with no choice but to wholeheartedly agree with Shore. We owe the alcoholic gentleman, incurable or otherwise, a debt of gratitude so large as to be unrepayable."

On that note I was escorted back to the ward to stay there until the paperwork could be taken care of, then finally shuttled up to Paul's ship on-orbit. Dr. Chamberlain rode with us, announcing his wish to begin doing a work-up on me immediately, if not sooner.

After I had lapsed back into the induced schizophrenic state Chamberlain suspected, a snippet of adipose tissue was removed from my derriere. The biopsy was repeated an hour later, after allowing me to sample some tasty ninety-proof cognac.

Shipboard "days" passed while I reaccustomed myself to living under microgravity, and vacillated between booze-induced lucid periods and the dire depths of purported mental illness. But even the non-lucid periods no longer seemed all that terrible. Made aware that I was reasoning normally deep within myself, Chamberlain waxed gentlemanly in a professional sense. Chattering continuously, he kept me filled in on what he was doing, and why he was doing it.

One morning shortly after Chamberlain gave me an injection, I stayed lucid for hours and hours. He looked in on me from time to time, observing me in silence without making a single comment. Late that afternoon he appeared again and asked how I felt.

"Fine, Doctor. I'm getting damned sick of looking at these four walls. Can I at least come have dinner with you and Paul this evening?"

"Oh, I have ever so much better news than dining in our dull company." Grinning like an overage pixie, he added, "You just passed your final exam, Dr. Shore. The injection I gave you earlier today was only glucose. We'll be keeping an eye on you for a time, but I'm ninety-nine percent certain the posthypnotic effect, if that was indeed the root of the difficulty once besetting you has been permanently suppressed.

He zipped out of the compartment before I could thank him. I was digesting my newfound freedom, in fact reveling in it, when the door slid open and a dinner tray arrived.

Smiling her sunny smile, Alexis Lemmon was carrying the tray.

Eleven - Fall Back and Regroup

We had a reunion of sorts, albeit a brief, subdued affair. The Raja and my fellow ex-patients all looked drawn, still decidedly unwell. Most were reluctant to even think about, let alone discuss the recent ordeal in the Sinus Iridum Medicenter. I knew exactly how they felt.

When our get-together broke up, Das split for New Delhi where he intended to unwind for an indefinite period. Most others went their separate ways, eager to reclaim their lives by indulging in a few weeks, months or in some cases years of rest and recreation.

Alexis took me home with her to Xanadu. There may be something more idyllic and restful than lounging about with your beloved in a half-timbered Tudor cottage, doing not much more than listening to the daffodils grow outside the French windows. If so, I have no idea what it might be, or where.

I was applying depilatory cream that first morning in Xanadu, thinking to rid myself of the stubble on my jaws and cheeks, when I came up short at sight of the sunken cheeks, the dark-circled eyes staring back at me from the former avatar in the mirror. A touch of silver had invaded either temple, and *that* certainly hadn't been there before the adventure in Ceres cut short Demeter's starflight adventure. I didn't like what I saw in the mirror, not even a little bit, yet neither did I have any trouble realizing why a months-long, all-expenses-paid vacation in the booby hatch will leave you a lesser person than you once were. Guaranteed!

Over a breakfast of fresh pastry, fruit and the ever-blessed Earl Grey tea favored by dear darling, she filled me in on why our idyll was slated to be short lived. In light of her rather stern announcement, we made the most of our time, loafing while Nobbots and other former asylum inmates, plus others who for whatever reason had missed being stricken, were hard at work on activities the nature of I could only guess, were engrossed in pulling the team back together, getting all of Demeter's ducks lined up before again shaping trajectory for Ceres in Paul's ship. The revised Demeter Master Plan now called for a sharply curtailed list of personnel needed to resurrect the base, complete the starship and send it on its way to far Centaurus.

Paul got on the secure link to Xanadu twice or more times in my hearing to explain how, for the upcoming expedition, the least possible gram of supplies, including a few cases of the finest whiskey obtainable, plus lithium fuel-source slugs for the base's Lemmon Tokamak, would be in the ship's cargo bay. He promised that when the next optimum transit period rolled around in several months, would be in readiness. His nameless, numberless ship, covertly licensed by one of the benefactor nations eagerly backing Demeter, would first swing by Earth-Luna, dock momentarily at Xanadu and pick up us carefree idlers and the remaining staffers.

And, presto! Demeter would be resurrected and back in business, this time to stay. Nor would any antagonistic, interfering starry aliens be allowed to drive a single one of us round the bend a second time, a condition guaranteed by Dr. Chamberlain's magic potion, not to mention a generous ration of distilled spirits. What the semi-legendary psychiatric savant had termed "anti-hypnotic medication" was packaged in the form of slow-acting, twenty-four-hour spansules. None of us really thought there would be a need to use the meds, unless of course Stinky returned to haunt us and re-induce schizophrenic symptoms. The liquor was a secondary backup measure, plus a tot of bottled cheer.

In Xanadu, Alexis and I reveled in langorous ease and contentment. We stayed up till all hours talking, slept as late as we pleased. We took long walks across the worldlet's artfully landscaped hills and dales, and stuffed ourselves at mealtime. We were invited to lavish garden parties thrown by one or another of Alexis's well-to-do-and-then-some neighbors. Chamberlain himself came by the cottage one evening for dinner. Psychiatry medic aside, he revealed himself as an fantastically well-read, very interesting cuss with whom it was pleasant to converse socially, although his appearance did cast a momentary pall when he first appeared by evoking frightful memories of a period in my life I had no interest in remembering. Privately, Alexis refused to discuss our sojourn in the medicenter, treating it as a bad, bad dream, an insidious nightmare that swiftly dissipated upon awakening. She suggested more than once how reliving our collective ordeal would amount to a negative, utterly useless reprise of something far better wiped from memory en toto. We had Ceres to look forward to, she insisted, and the triumph of Demeter.

What with servants eager to answer every wish and whim, gourmet dining a daily *fête*, and a delightful, magic worldlet in which to while away the hours in company with Alexis, who was seldom out of sight and never out of mind, I began to have second thoughts about the necessity for Demeter. Having stumbled into a perfect niche for myself, I began to wonder if a journey to the nearest stellar system would be all it was cracked up to be.

Naturally I didn't mention any of this heresy to my true love. Alexis belongs to an exotic species consisting of iron butterflies, or at least that might be the consensus opinion until getting to know her well enough to recognize she's mentally constructed of the toughest of tough, carbon-free maraging steel, not plain old iron. Truth be told, it took me a some time to discover how that clear-skinned English beauty, the undoubted love of my life, should have been able to fly to Alpha Centauri on willpower alone. Alexis could be charming, carefree as the wind one instant, and the next diamond-hard as a carbide drill. Some gal!

At any rate, not many weeks after Dr. Chamberlain sprung us from the Sinus Iridum Funny Farm, I began feeling like my old self again, whatever you care to make of that.

A small, shallow lake nestles in a hollow two kilometers inboard from Alexis's enchanted Tudor cottage, its curving, mirror-still waters surrounded by meadowlands and a small copse of shore pines. We took a picnic basket and spent the "afternoon" lolling about, rowing a flat-bottomed skiff around the lake, strolling in the woods, and arrived back at the cottage to find the Surrey with the Fringe on Top parked next to a gate in the white split-rail fence. Nobbots, Mattingly and Casey Chew were conversing amiably in the parlor.

Sir John greeted us effusively, remarking on how wonderfully well we both looked. Once the hearty chit-chat was out of the way, he sobered and came directly to the subject at hand. "I regret having to tell you we messengers were forced to bring some rather bad news, plus a smidgen of the other sort."

"May we hear the good news first?" requested Alexis.

Paul hefted the metal transit case he'd brought in. "Wisest, I think, if we talk downstairs."

* * *

To the best of my remembrance, not since returning from Luna's Bay of Rainbows had Alexis traipsed downstairs and so much as peeked into her father's cluttered office. She unlocked

the door, switched on the lights and made us comfortable. Paul busied himself setting up and energizing the security screen while Alexis asked after Casey's wife and infant son.

"Laura and baby son not go back to Ceres." Slumped in a folding utility chair, his pudgy hands characteristically folded across his ample belly, Chew looked like a dyspeptic kewpie doll training to be a Sumo wrestler. "She not willing to risk danger to boy."

"Perfectly understandable, Casey. I appreciate her concern, but that particular endangerment seems to have passed. Will they be staying with her family in Beijing?"

"No, San Francisco. Laura has relatives there."

"Unfortunately," put in Sir John, "I fear that for a number of reasons some erstwhile Demeter colleagues share Mrs. Chew's apprehension. Paul succeeded in persuading a handful of scientific and engineering specialists to rejoin the team. Unfortunately, however, only a tot of our best technicians signed on. Dr. Salmo adamantly refused to hear out Paul's invitation."

Alexis frowned. Concerned about the prospect of reviving Demeter short-handed, she said, "Oh, dear! Is that the bad news?"

"Quite, my dear, yet only the first dribbling dab." Mattingly's manner turned peevish. "Worse by far is the fact that Demeter's budget has been sharply curtailed. The, er . . . recent reversal we experienced in Ceres has made our benefactors rather chary about further releasing their purse strings."

"I'm reluctant to add to John's woeful revelation," declared Paul, "but I have to tell you the program's future has turned cloudy for a less wholesome reason. Last week I attended a high-level meeting during which abandoning sponsorship altogether, as well as funding for Demeter, was seriously discussed."

"Backers are running scared?" I guessed.

"Precisely, Shore." Sir John spread his palms, a gesture of helplessness.

"But," objected Alexis, "there must be some way to convince them the danger is over? Dr. Chamberlain's suppressant medication should reassure all concerned nothing of a similar nature can occur."

"Of a similar nature," echoed Nobbots, making his point with four poignant words. "The subtle attack we suffered was elliptical, or tangential if you wish, yet awesomely effective. What if next time that spice-reeking eyesore settles on a more direct approach? What if it and any theoretical associates, assuming such exist, become desperate for whatever reason to keep we humans confined in our playpen, and decide to . . . well, take off the gloves so to speak, and physically assault the base?"

"Yes, but —"

"Once and for all," pursued Paul, cutting Alexis off before she could comment, "we should keep one fact in mind. During our most recent trajectory to Ceres, and once there as well, we dealt with the representative of an unknown culture, the scope and capabilities of which are presumably superior to anything we know about. That alone makes a practical impossibility of trying to guarantee the safety of any Demeter personnel willing to return to Ceres."

"You've neglected to mention," objected Alexis, "how it stated violence not being . . . how was it put? Not an option of true intelligences."

Paul nodded. "I remember that clearly. Yet in view of what's happened to date, as reassurance isn't that a bit lame? It fairly screams an invitation for us to suspect otherwise."

Alexis' obstinate nature came to the fore. "Llogaar, as wishes to be addressed, hinted that violence per se was out of bounds under whatever rules, should they exist, which apparently constrains the actions of either alien species thus far encountered. Didn't you form that impression, Paul?"

"Suppose I did?" asked Nobotts, his inflection sardonic. "After exposure to our spicy thing's above-it-all warning, gaining any sort of 'impression' about what might or might not constrain that liverish monstrosity seems like very thin reassurance. To my way of thinking, the notion of it following any rules falls somewhere between tenuous and nonexistent. We think of violence as out of the question, and Llogaar did intimate that to be the case, yet the quandary remains. Is Stinky, to use my hot-tempered pilot's label, forced to abide by the same laws, constraints, ground rules or whatever that limit Llogaar's actions?"

"I'm with you there," I told Nobotts. "Rules or no rules, 'This One' made me doubt if it would consider *anything* out of bounds. What if it's determined to get whatever it wants at any and all cost to itself or anyone else, including us."

Paul confessed to having formed an identical impression. "Reassuring the Demeter team," he added, "or for that matter our benefactors that a subsequent attack is out of the question, even unlikely, would smack of hypocrisy and self-interest. Speaking before the assemblage of benefactor nations, my first description of alien visitations drew and a hint of derisive humor, nor can our proven friends be blamed for skepticism? Would any of us have swallowed an outlandish tale of interstellar visitors based on not one shred of substantiating evidence, merely hearsay?"

No one responded to Paul's far from rhetorical question. Alexis diddled nervously with a stylus, glancing from Nobotts to Sir John to totally impassive Casey Chew. "You also mentioned good news," she told Paul, sounding like Little Girl Lost.

Nobotts smiled. "Outrageously good news! Absolutely no one other than Casey enjoyed one second of our stay in the medicenter. For him, however, the chance of uninterrupted cerebral activity resulted in a breakthrough he touts as extremely significant. Casey, the floor is yours."

Beaming, Casey turned to Alexis. "I simplify. Recall fifth expression of resolution?"

"Why, I suppose . . . Yes, I believe so. Fifth stage, um . . . hadron alignment sequence?"

"Just so," declared Chew.

At that juncture, the conversation turned into technical gibberish where the rest of us were concerned. I listened with half an ear to Casey launch a halting summary of his think-work while incarcerated in the psych ward. Alexis broke in from time to time to ask a question. After each interruption, the physicist grew more more animated and didactic. In the end, he snatched the stylus out of Alexis's hand, dithered while searching her cluttered desk for talking paper. I watched him generate scrawled symbology generate for a while, then glanced at Sir John and shrugged. He grinned, his blue eyes twinkling merrily.

Their huddle terminated when a squeal of delight erupted from Alexis. "Why, that's . . . It's simply *smashing*! Casey, you've eliminated the entire fourth through seventh excitation sequences. Marvelous, absolutely marvelous!" She rose behind the desk, a rapturous expression illuminating her delicate patrician features. "What this means, gentlemen, is that we no longer need between eighty and eighty-five percent hadron alignment to effect n-space transition. It also eliminates a good two-fifths — perhaps as much as three-fifths — of the ancillary electronic

hardware. We can have the ship ready for shakedown two or three months after reaching Ceres” Then her lips compressed and her countenance fell. “That is,” she concluded, “if a sufficient number of Demeter’s staff can be convinced to complete the program. Can we, Paul?”

Nobbots considered his response for a few dragging seconds. “It will be touch and go,” he said. “As things stand, I have eleven firm ayes, counting you and Shore, a round dozen maybes, and seventeen unqualified nays. Assuming for the moment six or seven “maybes” and one or two “nays” change their minds and sign on, it will give us a working complement of around thirty-three, yet that count includes my ship’s crewmen, who, while I’m sure they can make themselves useful, are capable of accomplishing only rudimentary technical tasks. Casey postulates a stay of two to three, or possibly four months. In consideration of that relatively short time span, I suggest we forgo the greenhouse and live frugally on whatever stores the ship can carry, augmented by anything that proves salvageable from the dried and frozen comestibles left inside the deserted base.”

“Good!” Casey Chew clapped his hands loudly. “We go!”

“The timetable is also a crucial factor,” added Paul. “If not for the half-year wasted in ferrying everyone home, and recovering from a major setback, Demeter would either be consummated by now, or disbanded. The problem is simply this: another year will find Ceres slipping behind the Sun, toward superior conjunction. At that distance it would be, well . . .” Although Nobotts let the thought dangle, his caveat came through with indelible clarity.

Sounding anxious, Alexis said, “As for our friends, what do you foresee, Paul? Will they sit still for one last try?”

Paul bobbed his chin affirmatively. “It will also be tight, but yes. In my opinion they can be persuaded. I was given letters of credit amounting to much less than we had anticipated, but marginally sufficient in light of the prospective, much shorter stay in Ceres. I plan to begin loading stores the minute we dock at Earth-Luna. The ship should be ready for departure in another forty to fifty hours, give or take. Can you and Roger shuttle over and come aboard by, say, tomorrow around nineteen hundred, Zulu?”

“We’ll be there,” assured Alexis. “Are you planning to come along, John?”

Mattingly performed a negative headshake. “I fear not, my dear. Holding an overseer’s whip in Galileo makes an absence just now quite impossible.”

“How about the Raja?” I asked. “I assume Das numbers among the ayes?”

Sir John chuckled. “Oh, no question about that. Jefferson showed up in E-L a week ago Thursday. Said he couldn’t wait to hit the road again, get back in harness. He’s looking forward to having you join us, Shore.”

Alexis pushed back her chair. “The it’s settled then,” she said, her air of anticipation clouded by a note of resignation. “This could be Demeter’s last gasp, and we shall have to do our utmost and make it count. Casey, we shall also pray that your simplification proves feasible in the hardware sense. It could mean the difference between success and —”

“Will work!” blurted the physicist, exuding solemn Confucian assurance.

“Dear God! I sincerely hope so,” declared Alexis.”

Twelve - Deus Ex Machina

We were busy packing, getting set to leave Xanadu. Her mood alternating from subdued to a touch more than effervescent, Alexis peeked into my one and only suitcase folded open on the bed. “Roger,” she accused, “you own hardly any clothing.”

“Us orphans travel light.”

“Oh, you silly! Must you forever dwell on the fact of being alone in the world as if it mattered a whit to anyone except yourself? Do try to get over it.”

I snapped the latches on the single, battered item of luggage, a holdover from my student teacher days, and set it down beside the walk-in closet. “Alexis, would you mind if I . . . What I mean is, would it upset you if I headed on over to E-L alone?”

“No, certainly not. But, why?”

“I have to, uh . . . There’s an errand I want to run. I could catch the early shuttle, meet you aboard when Paul’s ship docks briefly at E-L, okay?”

“I don’t see why not, if that’s your wish.” Her expression quizzical, she paused in the act of folding a fawn-colored jumpsuit. “Does revealing the nature of your mysterious errand make you uncomfortable, Roger?”

“Not at all. No secret, except . . .” I took her hand. “There’s another orphan I’d like to chase down in Earth-Luna. Guess I, uh . . . He isn’t really an orphan, but I have a whopping obligation to repay him for, uh . . . Let’s say I’d like to look after him, leave it at that.”

She put her dainty hand over mind. “I strongly suspect you mean the gentleman who helped you — helped all of us — escape from that horrid place.”

Unable to hold back a grin, I admitted being unsure whether the title “gentleman” applied to my friend. “Yeah, you’ve found me out, Alexis. The ‘gentleman’ in question is good old Henry Ogilvie. After all we’ve been through these past months, I couldn’t recall his surname and rang up Dr. Chamberlain last night from the inn while you were powdering your nose. I jotted down his whereabouts and spoke to Henry briefly. Fact of the matter . . . Well, I sort of halfway invited him to come along.”

Her lustrous blue eyes widened. “You can’t possibly *mean* that!”

“Hey, why not? A spaceman by trade, Henry spent more than twenty years shipping with *GrossEuropa Raumschiff*, and we’ll be departing short-handed. He sounded happy to help out in any way he could, and meant it — cleaning the bilges, serving meals, sweeping up, anything and everything, whatever needs doing. Said he’s eager to get off his duff and do something useful. I couldn’t tell him our destination, naturally, but . . .”

Suppressed laughter bubbled from Alexis. “Dear Roger, that is absolutely the most ridiculous . . . What in the world were you thinking? Nobotts will have a litter of kittens if and when you trot Henry aboard ship. I know him; he’ll throw a thunderous tizzy complete with lightning bolts and a rainy deluge. You once told me Henry had been permanently hospitalized as an incurable alcoholic.”

“So why’re you complaining? You said it yourself, Alexis: this will definitely be Demeter’s last gasp. Sink or swim, once we’re in trajectory Henry couldn’t break security if he wanted to. If he drinks Paul’s anonymous skygoing tin can dry, we can crank a few hundred liters of ethanol out of the tokamak and let him mix his own firewater.”

Alexis threw back her head and laughed aloud. Trailing off intermittent giggles, she said, “Magnificently argued! I’m coming with you on the early bird. After that incredible recital I don’t believe it wise to let you out of my sight. Besides, I’m dying to meet Mr. Ogilvie. Now be truthful, Roger. What made you decide to issue such an outlandish invitation?”

“Oh, I don’t know. Guess us orphans have to, uh . . . stick together.”

She hugged me tightly. “You *are* a darling.”

I stroked her hair. “Listen, the weeks we’ve whiled away here in Xanadu have, well . . . Being here with you has meant so much to me, except it went by too fast, and I hate like hell to leave. It’s like abandoning paradise for . . . who knows what?”

She peered at me, those wonderful blue eyes misted. “One day we’ll have a genuine homecoming, Roger. I know it, *feel* it. Sometime in the future we’ll be spending our golden years in this cottage. We’ll tell our grandchildren tall tales about the pristine voyage to the stars.”

Dumbstruck doesn’t halfway describe my state of mind. Starflight was a concept that had settled in comfortably, firmly established itself. The notion of teaming up with Alexis on a life contract, having children — grandchildren! — was another matter entirely.

We boarded the noon shuttle at Xanadu’s counter-rotating, microgravity docking hub and arrived in Earth-Luna just as a shipload of jabbering, gawking day-trippers flooded the midway. Alexis and I elbowed our way through the touristy tide, and were mistaken for honeymooners by a fast-talk huckster who fell in step and tried to sell us the Moon. I shooed the slicker away — no easy task.

I’d used the vidicom terminal before leaving Xanadu, letting Henry know when and where to meet us. We found him watching holovision in the transient passengers’ lounge. “Hiya, Rog!” Clear-eyed, looking spruce and ready to fight tigers in a new lounging suit that would have been a perfect fit on anyone taller and slimmer, told me I was looking great, just terrific. Upon being introduced to Alexis, however, he acted awestruck clear down to his socks, and stammered uncomfortably when she thanked him for rescuing us from the medicenter.

“Got your bags packed, Henry?” I asked.

“Sure, stowed over there in a passenger lounge locker. ”

“Aren’t you interested in learning our destination?” inquired Alexis.

“Not really, Miss Lemmon. Been a ground-pounder way too long, so it don’t make much nevermind to me. Past time to get my spacelegs back underneath me.”

Paul’s nameless, numberless ship was berthed nose-first in Dock Four of E-L’s nadir berthing ring. We came aboard as a threesome, pulling ourselves through the open main airlock compartment on tight-stretched freefall safety lines. Steve grinned, nodded a polite greeting. It surprised and puzzled me to see the pilot offer Henry not so much as a second glance before he casually punching in commands to close the airlock hatches.

Paul Nobbots also surprised me for maybe the umpteenth time by looking Henry over coolly, then offering his oversized right hand to be shaken. “Good to have you aboard, Ogilvie.” He put Alexis and me in our places with a sly sideward glance and a wink.

* * *

During the early phase of outbound transit while under constant-burn acceleration, time seemed to compress twice as fast as it had during the previous trajectory. I gave thought to the matter, and decided the unexpected bonus was being delivered by Henry. The latest, most recent

recruit to Demeter surprised me as well as everyone else aboard by assuming the unexpected role of ring-a-ding entertainer.

One evening at dinner not long after departing the Earth-Luna System, Henry picked up a six-string acoustic guitar belonging to one of the crewmen. He began chording in an idle way, then suddenly launched into a serenade that made everyone stop chit-chatting, put asides their after-dinner beverage squeezetubes, sit up, take notice and listen with both ears. He confessed later to cherishing the old ballads he'd heard over and over and become familiar with during lonely off-duty watches between ports of call. Henry's scratchy whiskey baritone matched his appearance, but he turned out to be one of the truly rare individuals lavishly endowed with a rough as a cob voice, and limitless musicality. It's difficult for casual listeners to understand that voice and singing are poles apart, two entirely different things. On voice Henry was less than nowhere; as a singer, he was exceptionally outstanding. He did wistful renditions of "Black is the Colour," "Barbara Allen" and "Poor Wayfarin' Stranger," except Ogilvie extemporaneously amended the lyrics, delighting everyone by turning the words to, "Poor Spacefarin' Stranger."

Henry's impromptu, a semi-regular performances turned our convivial postprandial get togethers into events not to be missed. Everyone aboard who was off-watch and awake congregated in the commissary to hear him make music, which instantly made him the best friend of all hands. Even the ship's surly, aloof tomcat, Wellington, took a shine to Henry, who firmly believed cats operate on a wavelength all their own. In his view, cats think of us humans as giant can openers endowed with no particular virtues worth mentioning. Judging from the number of times I've unsuccessfully tried to pet Wellington, and been either ignored or on occasion hissed at, I became convinced Henry had the right slant on cats.

The ship's torch coughed once, sputtered, died on cue and we went into unpowered trajectory. The Freefall Squash tournament began immediately, or course. Alexis coached me to a point where it wasn't long until the Raja refused to face me in the court's six flats. I even occasionally won a game from my beloved, though the victories were few and far between. Besting Alexis at her own game takes some doing, believe me. Most importantly, I gained back some of the weight I'd lost during that wonderful, all-expenses-paid vacation in the Sinus Iridum funny farm, and began feeling topnotch once again. My sense of being a worldbeater diminished sharply upon being handed a comeuppance by none other than Paul Nobbots.

Size, quickness, dexterity and strength do not ordinarily occur in one package. Nobotts, however, was in no way ordinary. The exception who proved the rule, he was by far the quickest, strongest, most agile big man with whom I ever hope to lock horns in a Freefall Squash court. He didn't just obliterate my game, he made matchsticks of it. I had improved measurably since that first humbling encounter with Alexis during the prior transit, but Paul's whipping was far worse than Alexis' trouncing then. I left the court shuddering. Paul's deadpan expression didn't change a hair, but there was a satisfied gleam in his dark, all-seeing eyes.

We had been enjoying the freedom of weightless transit no more than four or five shipboard "days" when a crewman rudely burst into our stateroom without knocking. "Miss Lemmon," he cried, "you and Dr. Shore are wanted on the bridge pronto."

Half-awake, Alexis sputtered indignantly at the breach of privacy.

"They think it may be him, Miss Lemmon!"

"Him . . . ?"

I suppressed my indignation over his rude invasion. “Who do you mean?”

In a nervous funk, the crewman stammered, “Him, that, uh . . . thing.”

Alexis chased the well-meaning messenger out of our quarters. Scared and witless, we got in each other’s way pulling on jumpsuits, ignored the freefall safety lines and flew along the companionways with reckless abandon. I entered the conning bridge s Alexis’ heels. My relief knew no bounds when Llogaar tilted his oversized, elongated head in greeting.

Dr. Lemmon, Dr. Shore. It is gratifying to see you both looking so well. His too-tall figure, garbed in a robe of shimmering scarlet that showcased his “otherness,” did nothing to diminish the blaze of intelligence in his feline, yellow-green eyes. For the first time, I noticed the opaque nictitating membranes that slid closed and open when he blinked.

Both Paul and Steve, poised next to the helmsman’s console, gave an impression of being honed to a fine edge of awareness. Floating lengthwise in midair, the pilot dipped his head toward our towering visitor. “Says he’s the local cop on the beat. He’s fairly sure Stinky’s done a fast fade.”

No, young sir; that was not precisely what I hoped to convey. One hopes you will wisely disabuse yourself of that impression, nor does my assignment involve law enforcement in any sense of that archaic term. Think of my presence as . . . Let us say, to act as a referee, a term perhaps closest to being accurate in your vernacular.

“Have it your way,” said Steve. “But, you hinted that Stinky was making mischief somewhere else.”

My friends, the unit you refer to as Stinky is not an individual, merely one unit making up an incredibly numerous collective entity at present considered remiss for having grossly and erroneously interfered with the internal affairs of your society, a form of transgression severely frowned on by the hierarchical society of intelligences in which my kind have membership. Stinky, to again borrow your term, are widely known as . . . One moment. Transliterating the phylum designation is far from simple. You may refer to its kind as Multiflora Simulis, a collective entity severely chastised for reckless indiscretions that caused a particular peer group to dispatch an emissary, namely the entity now before you, in order to observe, record and make amends where possible for a serious indiscretion.

“Violating the rules of the game?” inquired Alexis.

An egregious offense distantly akin to what you suggest, Dr Lemmon. Yet it would be unwise for you to consider the unit’s onerous interference as a game. It is no game in any sense of that term. Were you to be enlightened regarding the ramifications of your entanglement with the exotic cultures seeking to proactively deny you your birthright, the discourse would not merely require lengthy, complicated disclosures, but would profane a solemn oath. At this juncture, it is impossible to divulge any further information.

“Are we never to learn the opposition’s identity,” asked Nobbots, “or why our efforts were obstructed in such a vile manner?”

As with all civilized beings, your kind must learn to walk before it can run, to run before attempting to fly.

“Exactly what Stinky told us,” I said. Fully aware how ingenuous the question had been, I asked if Llogaar was on out side.”

A response was slow in coming. *One strives to remain impartial, Dr. Shore, difficult though it is in this instance. Let us say encouragement is hereby offered, aid cautiously rendered to level the playing field as it were. Would a helping hand be acceptable, a gesture of goodwill?*

“We need all the help we can get from any quarter,” said Alexis. “But wouldn’t aiding us be construed as another form of interference?”

Not if viewed fairly, and balanced against what you have suffered,” denied Llogaar. “In hindsight, time is apparently the essential element after your prior misfortune at the unit’s hands. Callously inducing mental aberration was deemed grossly injurious, unjust, totally unacceptable. It seems a matter of simple justice to ameliorate the unsavory injuries suffered by certain of those active in furthering your enterprise. Sadly, no means exists to recoup the elapsed time lost since fleeing the planetoid, which no intelligent entity would construe as other than a critical hindrance to the prospective success of your high-minded overall venture. The sole purpose available to lessen the danger of a further attack will be to ease the passage to your destination.

“Time really is an essential factor,” confirmed Alexis. “When Ceres moves into apposition beyond the Sun, we shall fall out of contact with . . .” She broke off looking startled. “I gather that isn’t what you had in mind.”

“You saying Stinky may come back?” asked Steve.

Such an eventuality is not at all difficult to anticipate, and fear as well.

“Why,” asked Nobbots, “would that monstrosity be permitted to return and hector us? Does the peer group you represent have a double standard in that respect?”

After another brief silence, Llogaar’s “voice” crackled sharply in my mind. *A difficult query, which makes framing a permissible response equally difficult. To put it bluntly, in the most simplistic terms, the rogue unit in question has an assigned task to perform, as does the peer group representative now before you. Amplifying that statement would be to venture upon unsafe ground.*

Among his other absolutes, Steve is absolutely dedicated to pragmatism. “What the hell can Stinky do to us,” he demanded, “if and when the sumbitch *does* come back? Can’t you at least give us a hint of what to expect?”

Should wisdom prevail within Multiflora Simulis — a doubtful premise — the unit so colorfully described as Stinky will be permitted to do nothing more than observe and report to its own hierarchical peer group, precisely the activity I intended to perform until matters got out of hand. Yet one can never safely answer for the wisdom of others, nor the lack thereof. Other than exercising constant, unflagging vigilance, no other course will be open to you, my friends. The single option available with any appreciable degree of success is vigilance.

“Do you suggest,” inquired Paul, “ensuring the failure of our project is important enough for Stinky to risk additional censure from his . . . from its own peer group?”

Of vital importance, else it would have never dared risk what has already been risked. Leavetaking is now upon us. Do not be alarmed by whatever happens next.

“Before you go,” Paul said hastily, “can we ask what —?”

Please excuse our lack of manners, but despite the best of good intentions far too much information has been imparted for comfort. One sincerely wishes you the best of good fortune, and now farewell. It is unlikely that we shall meet again.

“Will we never be left in peace, allowed to conduct . . . ?” Nobbots found himself addressing an empty column of air on the conning bridge.

“Jesus-my-beads!” Steve’s head wagged in disbelief. “The way these buggers come and go takes getting used to. A helping hand, hah! This, I’ve got to see.”

His thousand-meter stare focused hypnotically on thin air where the vanished alien had lingered, Paul asked in a monotone, “Any of you ever read an account of Spain’s *conquistador* expeditions in sixteenth-century Mexico and Peru?”

“What . . . ?” Preoccupied with her own thoughts, Alexis had been less than attentive.

“The Aztecs for one,” Nobotts remarked drily, “saw horses for the first time in their lives. Mounted on the huge, unfamiliar beasts were armored giants armed with terrible thunder the giants used to kill at a distance. Taking it for granted that horse and *conquistador* was a single awesome, godlike creature, the indios prostrated themselves and worshipped the invincible invaders. Now I appreciate how they felt.”

Sounding gloomy, Alexis said, “You imply that we aborigines are far out of our depth.”

“It’s more than an implication.”

“Hey, look!” Steve’s sudden cry rang through the conning bridge. Staring into the imaging radar display tank, he added, “That treetop-tall galoot’s king-sized ball has moved out ahead of us, blocking our vector.”

Startled, Paul broke his introspective semi-trance. “Switch it to the display tank.”

The pilot punched buttons. The large holovision tank above the astrogator’s console glowed to life. The distant Sun was behind us, quartering; limned in wan sunlight, a featureless white sphere grew swiftly, filled the view forward display.

“Collision course!” Steve pushed himself away and flew to the helmsman’s couch. “Stand by for acceleration, five seconds.”

“As you were!” ordered Nobbots crisply. “We were told not to be alarmed by what might happen next.”

“You *trust* that kinky, outsized bastard?” demanded the pilot.

“Have we a choice? Relax, Steve! That’s an order!”

We held our collective breath as Llogaar’s huge, spherical vessel swelled larger, occulting the star fields visible on all sides. Until then, I had felt hypnotized myself, too much so to form a gut impression of how enormous the alien vessel really was. It ballooned, swelled to blot out the entire forward sky.

Then Alexis gasped, pointing mutely. An opening had dilated in the looming, convex surface directly ahead of our ship’s ogive prow. It didn’t look like a hatch, only a growing circle of blackness opening slowly like a quoit, and gaped hungrily as we approached.

Llogaar’s sphere swallowed our ship. The external sensors instantly went black.

“Sonuvabitch!” Steve’s oath ripped through the conning bridge.

My gorge rose as an excruciating sensation swept over me — not painful, merely damned uncomfortable, as if every individual cell in my body had been compressed slightly and twirled in some nameless direction before settling back to normalcy. I broke out in a cold sweat.

“Steve, call Casey. Get him up here.” Alexis gritted her teeth, fighting against a surge of mild nausea. “Hurry!”

Before the pilot could punch up the intercom, the identical gut-wrenching sensation washed through me anew. The external sensor displays sprang back into life. Stars speckled the View Forward image reproduced in the holovision tank. Llogaar's giant sphere was nowhere to be seen.

"Mother of God!" The first to overcome his shock, Steve gave voice to everyone's incredulity. "Shipmates, you're *not* going to believe this."

Dead in space a hundred or so kilometers off the ship's starboard bow, the pocked, almost-but-not-quite familiar, pocked face of the asteroid Ceres rotated very slowly, with celestial dignity, about its major axis.

13 - Stinky, a Reprise

Most of our slimmed-down volunteer returnee work force stayed aboard the grounded ship during the interminable "days" it took to reactivate Demeter's abandoned base. Clad in vacuum gear, Nobbots, Casey Chew and three technicians crossed the asteroid's surface and tried to cycle open the main airlock. The fusion tokamak had been offline for months, however; the fuel-cell backup power sources were frozen solid, forcing the half-dozen restorers to man emergency hand cranks and laboriously open the chamber's outer and inner hatches. Getting inside to begin resurrecting the facility, Paul confessed that they made their lightfooted way into a shambles.

Spoilage had ruined almost all the stores abandoned when Stinky's Operation Madhouse made us flee the asteroid in panic. Temperature in the food lockers had plummeted, bottoming out a few degrees above zero absolute, a super-freeze that logically should have preserved most everything, except deep space environmental conditions had eclipsed logic. When power from the shut-down fusion tokamak ceased, the frozen foods had partially thawed in the base's residual ambient temperature prior to refreezing, then sank into a deep, deep freeze. Aside from that, extreme low temperature had bulged and cracked hundreds of containers. Cartons of meat, vegetable pastes and suchlike had to be consigned to the fusion furnace once Casey had the base power system back on line.

Exposure to partial vacuum, plus the horrendous freeze, had also caused scattered physical damage in the facility. Plastic furniture coverings everywhere had turned brittle, and split open beyond repair. Two branch water pipes had not been thoroughly drained during the frantic scurrying prior to departure, and had burst, as well as numerous fluid and chemical containers throughout the complex. What with a lesser complement of personnel on board, these problems posed no hardships. The useless lavatory and laundry facilities once served by broken pipes were simply closed off. Once pressure and temperature had been restored, all hands turned to and worked like proverbial beavers, cleaning up the mess. In short order, functionality was restored, and Demeter picked up exactly where it had left off, with everyone doing three or four different jobs due to the shortened personnel complement.

Even full of surprises, Henry Ogilvie soon became more than a helper, and turned into a genuine godsend. He stayed cold sober during his assigned work-shift hours, showing everyone he could be counted on to pitch in wherever and whenever anything needed doing, including grunt labor, galley service, running gofer errands, bucking rivets in the assembly hangar, or any other kind of busywork.

The Raja and I put our heads together and attacked the astrogational calculations we had barely begun when Operation Madhouse began afflicting selected individuals. Das and I finished our labors in less than a subjective week, then turned to and did double duty wherever and whenever plain, ordinary day labor was required.

Casey Chew transformed himself from stolid, close-mouthed physicist to quadruply energetic dynamo. He not only supervised the removal and dismantling of the starship's n-space operational gear, but simultaneously revised the hadron alignment schematic circuitry in accord with the greatly simplified design parameters he had evolved while isolated within himself at the Sinus Iridum Medicenter.

Design — especially advanced electronic design — is a partially arcane art. An adept needs to develop some form of an intuitive feel for what is viable design-wise within specific parameters, and what is not. Certain ambitious individuals struggle through four or more years of tough, demanding courses to earn a baccalaureate degree in the demanding discipline, only to learn that aptitude and ineptitude exercising the rigorous discipline are not good bedfellows.

Das and I were privileged to look over Casey's shoulder during the comprehensive "fix" he instigated and supervised, and both came to realize how far off base our first impressions of him had been. As Alexis had predicted, he owned a truly wild talent it was easy to admire without reservation. In his own quiet for the most part way, Casey inspired the engineers and techs working under his direction by exhibiting the damndest, most uncanny knack for knowing *exactly* what was needed to solve a given particular circuit problem, not just major hang-ups either; scads of piddling glitches. He had marked up and chopped out sections of the schematic diagrams for each active and passive unit in his redesigned, ultra-complex system during the initial, boost-phase acceleration segment of transit to Ceres, but schematics reflect only the working logic of an elex system, subsystem or unit, not the nitty-gritty continuities needed to transform the schema into effective, functioning elex hardware driven in many cases by software or firmware.

Our interconnect wire lists, for example, were computer-generated from a set of parameters and ground rules he established for the EE team, except certain of those were difficult to interpret. The master computer, an idiot with a matchless eidetic memory, was of course neither smarter nor stupider than any of its counterparts, and able to perform those tasks it was directed to accomplish in accordance with Casey's cited parameters and ground rules, which mostly derived from theoretical optimums, not the multiple, often paradoxical compromises mandatory to ensure practical application. Therefore each time a technician ran into an inconsistency or unanticipated pitfall he alerted the cognizant engineer, who invariably whistled-up Casey for an on-the-spot decision. Rarely if ever did Chew disappoint them.

But each such revision required red-lining the pertinent wire lists or network lists in accordance with engineering instructions, which were not always one hundred percent crystal clear, then re-inputting the computer to generate a fresh printout of each wire list or network list. The Raja and I got stuck with much of this by-the-numbers drudgery. It wasn't what could be called difficult, yet maddeningly painstaking and repetitious.

All in all, the elex effort in Ceres amounted to a throwback resembling late twentieth century fabrication methods. We had neither the specialized equipment, nor the leisure, to produce monolithic microcircuitry, or integralflex cabling — a fully automated interconnection

technique used in sophisticated lunar factories to grind out googols of cables and cabling harnesses. We had to fall back on old-fashioned printed circuit boards and antiquated hard-wired interconnects, not to mention *hand-soldered* terminations, a horse-and-buggy technique less sophisticated than modern breadboarding. Once, finding himself over a barrel due to an unanticipated shortage of piece parts, Chew blithely stripped a holovision tank of the discrete components he needed, an action which dismayed his elektronikers. The holotank in question had been active for some time, hence reliability of the scavenged piece parts had to be considered at best doubtful.

Despite minor setbacks and mini-triumphs, we forged ahead watch after twelve-hour watch. The starship's electronic *raison d'être* came apart quickly under Casey's stern supervision, and slowly began to go back together minus four of the original black boxes. The remaining elix units, as well as the much larger matrix module assembly, were in the process of undergoing total rework, hence in seven and one-half weeks — not much more subjective time than we would have spent completing the transit to Ceres without Llogaar's "helping hand" — Casey's modifications were approximately two-thirds completed.

Morale had never been higher out in the shop or lab. Alexis was having trouble sleeping due to waxing excitement over the impending shakedown flight, while Dr. Kenneth Clarke "Casey" Chew was having equal difficulty holding his eyes open for a different reason; he was called called upon constantly during either twelve-hour work shift to answer questions, and settle arguments, often by rendering a tie-breaking decision. You might think he would have objected to being continuously hassled, but no, not indefatigable Casey, who left standing orders to be awakened at any hour to fill in whatever variety of pothole had appeared in the road, although not, thank you very much, for piddling bumps the techs were able to fill or smooth out on their own. Casey even seemed to be losing a little weight. Things were going a whole lot better than expected until Stinky the Spice Monster decided to pay us another call.

* * *

Alexis shook my shoulder hard, rousing me. She'd been pacing the floor in fit of insomnia when the base klaxon began honking.

"Up, Roger! Hurry!" She urged, and dashed to the intercom.

"Steve, what is it?" I heard her demand, imitating full consciousness by rubbing my eyes. "The same odd, in-and-out radar blip?"

"Negative, solid return." The pilot's amplified baritone was tremor-free. "Getting five-by-five backscatter. Has to be either Stinky's cigar, or a stranger very much like it. Pretty far out, directly over the base, and holding."

A breathless gasp from Alexis. "Any . . . communication?" she faltered.

"Nary a whisper. You'd best hustle on up here."

Clad in robes and slippers, we hustled. After Steve blew the whistle, Paul had stationed Henry outside the traffic station door. He looked pale and shaky when Alexis and I arrived, as if desperately in need of a drink. "Mister Nobbots said t'keep everybody out except you two," he told us in a jittery falsetto. "Jeez! Ever seen anything half so spooky looking?"

"Are you saying it's here?" demanded Alexis.

"A pair of 'em. Two . . . things." Henry swallowed with difficulty, accompanied the words with a slight shudder."

I took a deep breath, slid open the door and went in first, staying in front of Alexis in an ungentlemanly, protective way. A pair of the liverish monstrosities indistinguishable from each other floated in midair despite Ceres's low yet palpable gravity. One whiff of a pastiche of all the spices I'd ever smelled reincarnated the bottled fury I had lived with for endless weeks in the lunar psych ward. Seared by a white-hot urge, I wanted to wrest Steve's hand laser from his hairy mitt, turn Stinky and its look-alike shadow into cold cuts.

Alexis eyed the unholy duo fixedly, asking. "Have they . . . communicated?"

His gaze locked on the intruders, Paul's head slowly moved from side to side. "No, nothing," he said, low-voiced. "Take care what you say. Make them earn whatever information they can pry out of us. I think we should . . ." Nobotts trailed off when the nearer creature's "finger" tendrils began to writhe spasmodically like a panful of worms.

My children, your obstinacy knows no bounds. The semi-hypnotic, uninflected "voice" seemed to fill the traffic compartment, emanating from all quarters though I knew it could be "heard" only in my mind. Every nerve ending in my body tingled when whichever Stinky was radiating added, *This One despairs of saving you from yourselves.*

"We have no wish to be saved from ourselves," Nobotts had the guts to say. "We insist upon the right to be left to our own devices, and demand that you stop interfering."

Insistance and demands! What colossal vanity! You dare to insist on some supposed right, and presume to make demands as well? My children, your kind has failed to acquire any rights whatever, including an earned commodity your kind has assuredly failed to acquire, the basic right to exist, let alone the right of self-determination. Flaunting your so-called rights in defiance of the counsel offered by a peer group consisting of true intelligences is too ridiculous for comment. This One has taken exquisite pains to provide you with insight into the current situation far beyond your natural place of existence, which is definitely not as you might wish it to be. Your refusal to try and reap a modicum of understanding and appreciation from such counsel constitutes an abominable lack of judgment on your part, an attitude which adequately demonstrates your juvenile hubris, and serves to amplify your obvious lack of intellectual capacity. Now attend This One closely, for something must be made clear to you in the now, as well as henceforth forever.

Impatience is an attribute common to all youthful species. Your life spans, my children, range to eight or nine tens of the cycles tolled with respect to the frequency your backward natural place of existence circles its parent star. Here in the proper nest of your ancestors, each and every member of your species without exception reaches a form of semi-maturity only to find its primitive organism already beset by catabolic processes that undermine its limited rationality, in addition to the ability of performing even the loosest form of productive reasoning.

The thing's tendrils were weaving faster now.

You, my children, have yet to develop staying power, the ability to establish any degree of analytical certainty that might in a future time allow far-reaching plans to ripen and bear fruit. You dash about frantically, dependent upon intuition rather than rationality to reach your goals. Immaturity is reflected in every aspect of your primitive society — unchecked population growth, material greed, a constant, unceasing reliance upon violence as a means of settling differences. That you have blindly stumbled upon a crude method of achieving transit to a nearby stellar

system is a fluke, a quirk of fate similar to the random success of billions of mindless creatures tap-tapping at billions of writing machines, another of your childish similes, is that not so?

Sounding nettled, Alexis said, "I should think there would be little to fear from billions of randomly tap-tapping primates."

Fear? This One cannot conceive that you speak seriously, my child. For juvenile beings to inspire fear among true intelligences is a preposterous notion. It is you who must and shall know true fear. It is you who should approach with enormous dread the decision to venture beyond your natural place of existence with an enormous degree of dread. You have idealized your prospective venture as the initial step toward some half-imagined, millennial utopia, an idealized ambition to invade our common universe in a vain hope that it will lead to the glorious rise of your juvenile species, a catalyst inspiring you to transcend your mundane origins.

Know then, that were This One to prophesy the outcome of your outrageously daring venture, it would be to visualize your brashness as naught but a brief prelude to the extinguishment of your entire species.

From the corner of my eye, I saw Steve tense. "I don't vote in favor of being extinguished," he said, "nor cotton to threats. What say we ventilate these hunks of spoiled meat and have done with it, Paul?"

Nobbots made a calming gesture with one hand, but his other hand rested lightly on the butt of his holstered laser weapon. Totally absorbed by the twin apparitions floating before him in midair, he studied Stinky and its carbon copy with unblinking concentration. "Why," he asked, "do you and your kind insist upon strenuously opposing our prospective entrance into the galaxy? If there is nothing to fear from we . . . juveniles, why bother to sabotage our efforts?"

The question seemed to create brief hesitation in Stinky. Much like my friends, I'd been transfixed by the ugly monstrosity and its unreasonable facsimile, even while chafing inwardly at the outrage it had perpetrated on us — on *me* in particular. Recognizing Paul's air of restraint for what it was, I recalled his description of the ancient conquistador-aborigine encounter in Mexico. Allowing Steve to fire his weapon would probably have been like telling the Aztec warriors to pitch their wooden spears at the mounted, armored invaders from Spain.

The specifics of our dealings with you and your kind have been adequately explained. You were forewarned solely because of the intrinsic compassion all true intelligences must bear as a matter of course toward emergent species. It would be utterly wasteful for you to squander the promising future thus far displayed.

"Hogwash!" Steve bit the word short. "I can't swallow a single word of that. You didn't send a bunch of us to the dream factory just to save us from ourselves."

Nobbots cut Steve a sharp glance that bore a silent message. At that moment, I think he would have liked to strangle the pilot.

Ah, impetuous child that you are, This One does indeed take your entire meaning. You touch upon precisely the root of the matter, yet in point of fact one truism simply must be swallowed per your metaphor. The basic mental weakness in yourselves exploited by This One was not meant to be, nor would it have been, indefinitely harmful. The induced aberrations would have diminished, not persisted indefinitely. Therefore, no lasting injury was done.

"I don't believe a word of that either!" emphasized Steve. "And don't call me a 'child,' you misbegotten sonuvabitch! Llogaar explained how your nuthouse raid got you in hot water

with the big boss, whatever or whoever the hell it is. You were chewed out for what you did to us then, and you sure as hell can't snow us with this 'save you from yourselves' bullshit. Hightail it out of here before I . . ."

"Steve!" It was the only time I had ever heard Paul raise his voice.

No, more thoughtful one, a reason for you to intercede at this juncture does not obtain. You must allow the impetuous one to have his say. His bravado is refreshing, even though This One fears his defiance is akin to whistling in the dark, yet another of your flavorful similes.

Now attend This One a last and final time, my children. It is our sincere hope that you have not relied implicitly upon the advice and counsel of the entity known as Llogaar. While of admittedly superior intellect, the being in question is woefully weak-willed and slavish in its devotion to the instructions provided by the misguided peer group to which it belongs, and its idealistic approach to rational behavior will destroy you more surely than any other conceivable menace. In thus stating a fact, we offer merely candor, and a fervent wish that you will have the wit to subscribe to such counsel.

"Should we lack the wit to subscribe, what then?" Her head high, Alexis said, "A juvenile species we may be, but youthfulness does not make us fools. You keep stating a concern for our well-being, yet show us only enmity. Your attack on our senses and sensibilities was cheap and common, somewhat like shooting fish in a barrel, yet another of our colorful metaphors if you have the wit to understand it."

Hearing Alexis give the thing a dose of its own medicine was distantly amusing, but for some reason it made me feel doubly uncomfortable and endangered.

Alas, understanding does indeed reside within This One. Stinky's tendrils writhed even faster. It is only with supreme difficulty that we find any reason for allowing your adolescent petulance to continue apace. The entity known as Llogaar has rendered direct aid to your venture, a fact you need not bother to deny, for the details read plainly in your muddled minds. Llogaar is a meddler who shall do penance for the adventuresome misdeed he perpetrated by rendering aid in bringing you hence.

But enough wasted time and effort. This One senses the inborn drives and ambitions integral to your species you may think of as the essence that makes you what you are. Your unseemly determination to consummate the folly and proceed on the lethal, self-destructive path you have chosen for absolutely the wrong reason, is apparently immutable, unswervable. So shall it be. Having taken the first erratic, tottering steps along that path, you must now try and follow it to the bitterest of destinations, and so you will do. This One sorrows for you.

Dual pops sounded faintly as Stinky and its gruesome counterpart vanished.

The pilot relaxed, grunted, "Good riddance!" and holstered the laser weapon.

Nobbots let go the command pedestal's grab bar and whipped himself around to confront Steve. "In the future," he said in a voice choked with fury, his nostrils flaring, "you might think twice about provoking a creature you neither understand, nor are in any way competent to deal with."

"Aw, what the hell, Paul! The damn thing *threatened* us," protested the pilot. "Go on, tell me Stinky didn't rile you with that 'extinguish your species' routine?"

“More than I can put in words,” said Nobotts, tight-lipped. “But I did *not* take it as a personal affront. You will either learn to control yourself, or be confined to quarters should we ever be visited again.”

Steve pouted in silence.

“You will do as I say! That is a direct order. Provoking a brawl you can’t hope to win is the height of idiocy.” There was more than a hint of steel in Paul’s deep voice. “What you did may have made things worse, not better.”

“Meaning what?” demanded the mercurial pilot.

“For one, offering information concerning Llogaar was an act of deliberate, slope-headed stupidity.”

I waited, wondering if Steve would take the rebuke. He took it, but not lightly. It was plain to see he didn’t like backing down, although he offered a stone-voiced, “Apologies, sir. I was out of line. It won’t happen again.”

“See that it doesn’t.”

“What do you imagine it will do now?” Alexis sounded deeply worried.

Nobbots pondered. “Guessing would be futile. We’ll have to remember Llogaar’s commandment about being constantly vigilant. What’s more, it’s a dictum we’ll have to adhere to twenty-four-seven. All we can do now is post a continuous watch, get on with the program.”

“Vigilance!” exclaimed the pilot in disgust. “What the hell good will being vigilant do if you believe we’re defenseless against Stinky and his friend?”

“Because it’s far better,” declared Paul, “to know what’s coming at you than just wait to find out the hard way. Right away,” he ordered, “draw up a round-the-clock watch list. I want it on my desk ASAP. Include the ship’s crewmen, especially those most familiar with operating the radar gear. We’ll activate the ship’s radar stations as well as the sweep-scan here in traffic station, so if a bogie is missed the ship will give us a second chance to catch it. Whatever comes down, I want as many minutes of warning as possible.”

“Aye, aye, sir.” Frozen-faced, the sullen pilot shuffled from the compartment in the sliding quick march necessary under the asteroid’s all but nonexistent gravity.

Vigilance, the only valid precaution we could take, also happened to be the only option available. Vigilance became the order of the day, and we did our best to keep watch with meticulous care.

Unfortunately, we were looking in the wrong direction

Fourteen - Newsworthy

At the “morning” change-of-shift after Stinky’s second, decidedly unwelcome call at the base, Nobbots briefed Demeter’s assembled personnel. In his unrehearsed spiel, he gave a factual, detailed account of the alien visitation, filling the assembly hangar with long faces and drawn-down mouths, evoking apprehensive questions from the floor. Paul answered in the terse, matter-of-fact manner that comes to him naturally, and inspires confidence in his leadership. While his replies were terse, he came across as totally sincere by not downplaying the unknown danger we all might face. Afterward, to the accompaniment of resigned shrugs and mutterings, the second

shift went off to breakfast and bed, the first shift rolled up its figurative sleeves and went to work with a will.

The Raja and I ran into Henry in the machine shop. His pithy comment more or less summed up Demeter's attitude, nor could I find fault with his rallying cry: "Best we finish the bleeding ship, scoot on out of here and stop worrying about stinking aliens."

Casey Chew drafted Jeff and me as test technicians, and we jumped aboard a tail-chasing merry-go-round of grunt work, giving us no chance to fret about what Stinky's next move might be, or might not be. Tasked to wring out a baker's dozen multilayer printed circuit boards making up the reworked second stage n-space excitation sequence, without automation available we had to use antediluvian test procedures. The board assemblies, handcrafted by experts, had to be tested continuity by continuity, pin by pin, test point by test point — a painstaking procedure, during which neither of us found more than a few goofs.

The Raja mentioned knocking off for a soup and crackers lunch, but just then Alexis popped into the test lab. She didn't bother to say hello, good-bye, how goes it? or anything else. All she did say was, "My office, now!" about-faced and dashed away.

"Sounds like something's gone sour."

"My impression, too," echoed Jeff.

I knew something serious was in the wind soon's we breezed into Alexis' office. Nobbots motioned for the door to be close behind us. His hands characteristically folded across his dwindling belly, Casey looked sleepy, out of sorts. Alexis fidgeted nervously behind her desk.

"Demeter's been blown," announced Paul without preamble, a light film of perspiration sheening his expressionless ebon features and high forehead. "Could hardly be worse," he added in a monotone. "Roughly twenty-four hours ago, an anonymous press release appeared simultaneously on every major news service linking Earth, Luna, Mars, and a pair of trans-Jovian satellites. It featured a comprehensive, detailed account of Project Demeter, naming names, dates, locations, goals, sponsors, expenditures, and a number of incidentals that were anything but minor. In short, the program's blown wide open, our cover hide and seek totally erased. We've been ordered by the U.N. — not requested, *ordered* — to cease and desist from pursuing any and all objectives in any way, shape or form."

"Stinky!" the Raja and I said in unison.

Paul's bleak grimace confirmed our conclusion. "Its first attack was sly, underhanded," he said. "This one is every bit as subtle and underhanded, yet enormously more damaging."

"Can't fold our cards now," I objected. "Not after coming this far. We have no choice but to tell the U.N. to go straight to hell."

"I'm afraid it isn't that simple, Roger," Alexis sighed. "The commandment to cease and desist issued by the U.N. Security Council is a judgment with which our remaining sponsors will be forced to agree."

"Two coded messages were received," said Paul. "A third is being decoded as we speak, and guessing the gist of it even before the computer spits out a decipherment is simple. We'll be directed to pack up, abandon Ceres without questioning the reason or necessity."

"Foolishness!" Casey Chew's eyes were narrow to slits. "Success almost here. No run like scared chickens. Not now!"

"Wish it were a matter of simply toughing it out," said Alexis, "but it isn't."

“We were also informed,” declared Paul, “of a serious war scare brewing sunward. A trio of Third World leaderships has already petitioned the United Nations, urging in the strongest terms that harsh sanctions be imposed on all remaining benefactor nations who aided us in this, er . . . “outrage.” The situation apparently grew to tense proportions overnight, and could further deteriorate unless we knuckle under and comply with the U.N. directive.”

An ominous stillness stifled conversation. Everyone was thinking, trying to assay the full implication of this latest alien attack, and trying to invent an out. *Any* out.

“Hold it,” I heard myself say. “I remember reading how the most monumental news stories of all time would be the Second Coming, and first contact with an alien species. If Demeter’s blown, why not capitalize on the fact that during Demeter’s trials and tribulations we have crossed paths with not one, but *three* telepathic extraterrestrials, one benevolent, the other two supremely antagonistic? Wouldn’t that at least lift some of the heat off our —”

“Hold it, Roger!” interrupted Nobotts, tossing his head in frustration. “You’ve leaped to an untenable conclusion. The news release made no mention of extrasolar alien visitations.”

I groaned. “And if we try to sell the woolly tale, we’ll only look more ridiculous.”

Alexis nodded glumly. “Congratulations are in order. Our odoriferous antagonist, ‘This One,’ has apparently covered all bets.”

Nobotts shrugged. “Much as we despise Stinky’s methods,” said Nobotts, “it’s sensible to give credit where credit is due. This latest below-the-belt shot amounts to a consummate stroke.”

Paul’s somber statement generated another interlude of weighted silence, and weighty thought. I went to Alexis, draped a comforting arm across her shoulders. She sat ramrod stiff, every gram of feminine pliancy gone, in no mood to be comforted. I took back my arm.

“You go home,” announced Casey Chew. “I stay, finish ship.”

“Hear, hear!” The Raja’s dark eyes glistened wetly. “I’ll be here, giving you a hand.”

“Me too,” I said.

“Nor will I let ugly, scheming monsters from the stars run me off,” declared Alexis. “Not now, not after all we’ve been through, especially after struggling back to a point this close to completing Demeter. The vote is four against one, Paul.”

Nobbots’s lip curled derisively. “Has anything I’ve had to say led you to believe I am prepared to throw in the towel? If so, be doubly-assured it was not my intention. Nevertheless, I want to hear a decision based on rational thought, not raw emotion. Is that asking too much?”

I had been silently stewing about that very same subject. “Okay, try this on for size. Just suppose a major war between the Haves and Have-nots does break out. Suppose hundreds of millions die in the conflict, and suppose —”

“Thus far,” interjected Nobotts, “your suppositions orchestrate the end of civilization.”

“Not so, Paul! Hear me out,” I insisted. “Suppose the absolute worst-on-worst were to come about — a thermonuclear holocaust on a scale so vast few if any survive.”

“Finis to civilization,” insisted Paul conclusively.

“You may be right,” I admitted, “yet could also be totally wrong. Armageddon on a global scale would at minimum mean a hiatus in civilization, though not necessarily its demise. Humans are scattered from Luna to Jupiter’s moons, from Xanadu to the research station way to hell and gone out on Titan. And let’s not forget the Bevvinase semi-systemic changes wrought by the Mars-rationalized carbon dioxide freaks, who think of themselves as living one notch higher

in the evolutionary scale than we poor oxygen-breathers, and glory in their adaptability. After taking our technology and culture into solar space, we're preparing to carry it out to the stars.

"Lord knows," I added, now on a roll, "I'm *not* advocating Armageddon, or anything like it. It would be the supreme tragedy; generations would have to pass before the world could repopulate itself, not to mention the interim years afterward, when things would very slowly return to something resembling normalcy. But let's trade-off the alternatives. Which is more vital to the future of our kind, guarding the bickering, cancerously overpopulated, polluted planet from a holocaust that may be inevitable anyhow, or opening up the universe?"

"Good!" Casey Chew clapped his hands. "That good, Roger! We take chance, and go."

"Shore," said Paul, dark eyes intent and agleam, "you've taken the long view, expressed the noblest purpose anyone could imagine for carrying on despite the U.N. directive. But let me play devil's advocate and critique your overview of the current situation. Ethically, morally and in every other conceivable way, we have absolutely no right whatever to gamble with the fate of the homeworld and practically everyone in it."

"Ethics and morality be damned!" I said. "The prize is worth ten times the risk, Paul. I sincerely mean that! Humanity has survived thousands of wars in the past."

"None," denied Nobotts, "resembling in any dimension the one you envision."

"Granted. But does cashing in Demeter guarantee such a war will *not* take place?"

"It certainly does not," put in Alexis. "The fuse was lit long ago, and it's now a much shorter fuse that sputtered and burned ever since."

Nobbots's solemn blink conceded agreement.

"Now hear one last suppose," I announced. "This one's hairy as hell, so hold on to your opinions till I finish my say. Suppose we pack it in per the U.N. dictum, head home to E-L, and find ourselves looking down in anguish on the smoldering remnant of the once upon a time gorgeous, blue-and-silver planet of our ancestors. How many centuries — millennia — would have to pass before our kind would be allowed another legitimate shot at the stars?"

I sensed in his change of expression that my mighty thrust had gotten through to Paul, saw it in his dark eyes.

"I go," declared Casey Chew. "Rest of you do as you wish."

"Paul," Alexis said, "you've been closely associated with Demeter since its inception. I find it strange for you to be against taking this awful risk, while Casey, Roger, Jeff and I —"

"Opposed, not for one second!" insisted Nobotts. "The devil's advocate does not necessarily believe in the devil's work."

"You favor pushing on?"

"Wholeheartedly! Oh, I admit straddling the fence. Perhaps Shore's argument swayed me as much or more than anything else." He turned to Casey. "How long until we prep for the shakedown flight?"

"Month, maybe few extra days," said Chew without hesitation.

Paul thoughtfully stroked his little spade beard as if to make sure it was still there. "With respect to their respective positions and distances, not even a U.N. military torch ship could trajectory here from the vicinity of the Earth-Moon System in less than roughly sixty real-time days." He snapped his fingers. "Alexis, am I correct in thinking your mind is made up?"

She seized my hand, gripping it hard. “Every instinct shrieks, ‘No, we dare not risk it!’ But I can’t bring myself to say it. We simply must go. *Must!*”

Nobbots turned to the Raja. “Jeff . . . ?”

“Tally ho! Alpha Centauri, or bust.”

“Do I have to ask you, Casey?”

“We go!” was all Chew had to say.

Nobbots shot a glance at me, but didn’t bother to ask the question of questions. “The tally appears to be unanimous. I suggest that we . . .”

A loud double-knock on the door caused Paul to break off, frown and command the door to slide open. Standing in the corridor looking sheepish, Henry Ogilvie wordlessly held out a sealed envelope. “Steve said I should get it to you right smartly, Mr. Nobbots.”

“Thank you, Henry.” The door slid closed in Henry’s face. Paul slipped a thumbnail beneath the folded printout’s flap. While scanning the flimsy sheet bearing the decoded message, his normally impassive features jelled in a mask of suppressed fury. “Cancel the jubilation,” he declared woodenly. “This tells us a civilian torch ship left circum-Mars nine subjective hours ago Zulu with a dozen or more newshounds aboard. Amalgamated News Services’ office in the Martian capital, Jesperson, dispatched the ship. Apparently Demeter’s being billed as the biggest, most important news story of this or any other era.”

Jeff groaned. “We never considered Mars.”

“How long . . . ?” inquired Alexis, apprehension clouding her pale blue eyes.

Paul sighed. “Our sixty days of grace have evaporated. Roger, you and Jeff run some numbers if you will, and calculate an ETA? I’d estimate thirty-one-or-two subjective days, maybe less. As a ballpark figure, does that sound reasonable?”

The Raja leaned back, eyes half-closed, his expression extra-solemn, and let the wheels turn in his head. Sounding dejected, he said, “Uh-huh, on the order of a real-time month if I correctly recall the approximate orbital position of Mars relative to Ceres.”

“Work like hammers of hell,” urged Casey, defiantly cheering us on, “and we go!”

* * *

Work we did — a whopping understatement. Chew gave up sleeping entirely, or so it seemed, and turned into a revolving, foursquare martinet. Yet after learning the score, none of the engineers, techs or anyone else who jumped to comply with his orders and demands complained. The twelve-hour shifts were abandoned. We all humped until we could no longer stand, slept until we could once again stand, and humped some more. As usual, Casey saw to everything personally. He watched with slitted eyes that missed nothing as the remaining electronic black boxes went back together again chop-chop. Unit testing by the Raja and me brought to light a few glitches and bugs that had to be run down and rectified or exterminated. We even notified the techs of the necessity to fab one complete new printed circuit board, which also made it necessary to cannibalize four precious microdevices lifted from the original unit, a radical redo and component reuse made necessary by an overtired techie who’d inadvertently struck the board with a tool, cracking several hair-fine etched-copper traces.

Concurrent with electronic systems testing, the power engineers began checking out the starship’s onboard mini-Lemmon tokamak, which may sound dangerous To the uninitiated, but isn’t if normal precautions are exercised. Tritium itself is mildly radioactive, and requires

shielding; but even in the event of a tokamak blowout — an unheard of occurrence, since it is impossible — the furiously excited, magnetically pinched whorl of plasma in containment would dissipate instantly and harmlessly upon encountering any solid object, or for that matter the ambient air inside the assembly hangar. The plasma employed in a nuclear fusion system is for all practical purposes a semi-vacuum superheated to the point of approaching the umpteen million-degree temperatures reigning at the center of the Sun, yet it will die an instantaneous death if exposed to the “normal” environment magnetic containment is lost, or fails.

I saw Alexis occasionally, if only in her office. She would either be sleeping the sleep of exhaustion when I stumbled back to the quarters we shared, or else had revived and was either in the act of dashing back to work, or had already left. Our love life went to hell in a handbasket.

Grumpiness, short answers and temperish blowups swiftly became the order of the day during that final, hectic month. On more than one occasion I chanced to notice the way Nobotts and the mercurial pilot avoided looking directly at one another when giving or receiving orders.

I was having a lonely evening meal in the commissary when Nobbots set down his tray across the table, saying only, “Roger,” the shortest of short greetings. I couldn’t help noticing that his left cheekbone sported a prominent knob, and the eye above it was swollen partially shut. His nose looked slightly disarranged, too, as if it had sustained abuse, and he seemed to have difficulty holding a fork.

“S’pose you ran into a door,” I said, fishing for an explanation.

“I suppose so,” he muttered, not looking up.

At the time, I chalked up the minor injuries and his gruff, churlish attitude as afflictions typically afflicting each and every member of Demeter’s overwork-afflicted staff. But Henry happened to have overheard the kickoff ceremony, and filled me in. “Jeez, Rog! Must’ve been some hellacious donnybrook ‘twixt Steve and Mr. Nobotts.”

“A, what . . . ?”

“Happened t’be there when the tussle jump-started. Mr. Nobbots asks Steve if he’s bent on holding a grudge the rest of his life, and Steve says, yeah, he prob’ly will, or most likely even longer. Then Mr. Nobbots invites Steve to meet him in the ship’s Squash Court so as to learn who’s the better man. Steve says he already knows he’s the better man, but guesses by rights he’s obligated to prove it in the interest of science, or some other cockamamie reason. I bet they went at it like two tomcats in a barrel, ‘cause I know both came out bleeding.”

I thought about Henry’s tale. “Wouldn’t mention it to anyone else if I were you.”

“Uh-huh, see what you mean, Rog. Won’t say a word.”

Less than a week after Steve and Paul settled their differences *mano-a-mano*, Casey straightened up in the hangar and grinned at me in his own particular slow, Buddha-like fashion and announced in one word that there was nothing left to be done: “Finished!”

During the following “morning” shift, pumps were set to work scavenging the air in the assembly hangar. When fully depressurized, the doors parted from their seals and rolled back, opening the hangar to vacuum as the residual air whooshed out. A crewman clad in vacuum gear drove the ship’s tracked handling dolly inside inside the hangar, and the overhead traveling crane slowly and carefully hoisted the starship about two meters, swung it around ninety degrees and gingerly deposited it in the resilient erector cradle. Designed to operate under Ceres’ feeble, next-to-nothing gravity, the erector dolly looked childishly flimsy, but did its job.

A concerted dither ran through the weary skeleton force now manning Demeter. All hands had a strong desire to go outside and watch baby emerge, especially Alexis and me. We were in the process of suiting-up to do exactly that, chattering happily in the airlock service area, when the alarm klaxon started honking throughout the length and breadth of the complex. Hearing it's harsh sound was like suddenly, with no warning, being drenched in an ice water douche.

Alexis and I got out of our vacuum gear hurriedly, raced each other to the traffic control compartment. The radar blip depicted a solid return that soon proved not to be backscatter from either Stinky's gigantic cigar, or Llogaar's enormous white sphere. The Martian torch ship *Argyre* of Phobos registry arrived circum-Ceres crammed with newsies hot on the trail of what had been touted the prize story of this or any other century.

For us, it was *also* news.

Bad news.

Fifteen - Snow Job

As a breed, newsmen and women, or for that matter media types in general, are not known for their shy, retiring, tactful natures. Once the *Argyre* had grounded and been secured, the new arrivals proved to be no exception to the general rule. Accompanied by a handful of curious ship's crewmen — hardy Mars-rationalized bo's referring to themselves as carbon dioxide-breathing "Marsrats" — a dozen journalists of the Martian press corps and a pair of holovision media anchors wasted no time storming our barricades.

Only to be repulsed.

Having issued laser weapons to the ship's crewmen, Nobotts led the pressure-suited posse himself, semi-jocularly telling Alexis he meant to head off the landing party not at the pass, but on the asteroid's bare, pitted surface outside the base's main airlock. The rest of us gathered before the largest holovision tank in the base recreation lounge, watching and listening on the suit-to-suit frequency to an exchange that went something like this:

Stranger clad in bright, Day-glo orange vacuum gear: "Sig Tollefson, Martian bureau chief for Amalgamated News. Have I the pleasure of addressing —?"

Nobbots, interrupting: "Mr. Tollefson, you and these others act as if you with to intrude on a private research facility. You have no business here. Please return to your ship."

Tollefson indignantly: "Intrude . . ? You offer a damned shabby welcome, I must say. Let me remind you, sir, that we are in deep space. No one can claim the ownership of Ceres."

Nobbots: "Correct, only the improvements, sir. You are more than welcome to use the remainder in any way you see fit."

Tollefson more indignantly: "Now hold on! We didn't burn a hole in vacuum all the way from Mars to be put off by some —"

Nobbots extra-sterly: "Once again, Mr. Tollefson, turn around and take these people back aboard ship. If you refuse, we will not be held responsible for the consequences."

Tollefson, fuming: "Well, of all the high-handed . . ! Listen, as accredited, authorized representatives of the free press, we will *not* be intimidated by a few men toting laser weapons. We came to interview the leaders of this project of yours, and mean to do exactly that."

Nobbots calmly: "Order-r-r-r . . . arms!"

Tollefson: "Oh, come on! Playing cowboys and Indians won't scare anyone. Neither you nor anyone else dares to try and buffalo the press. We outnumber you three to —"

Nobbots every bit as calmly: "Presen-n-n-t . . . arms!"

Tollefson: "Now hold it, f'Chrissake!"

Nobotts even more calmly: "Read-d-d-y . . . aim!"

Tollefson: "Dammit, listen to me!"

Nobotts: "Discretionary targets, rapid fire half-second bursts at my command. Fire!"

An volley of laser beams stabbed the sky over the heads of the newsies.

Watching in the recreation compartment, the rest of us cheered and laughed upon being treated to a view of the backsides of roughly twenty pressure suits disappearing over Ceres' abruptly foreshortened horizon in long, not in all cases graceful leaps and bounds.

Alexis and I greeted Paul when he stepped out of the main airlock. Cracking the seal of his fishbowl lens, he undogged it, unlatched the headpiece, tilted it back and inhaled deeply.

"If this newsie Tollefson had called your bluff," I asked, "would you really have opened fire on them?"

His expression indecipherable, brows arched, Paul eyed me without expression. "We may play poker again, and I won't have you reading my mind. Perhaps you should ask Alexis."

"Oh, really! Dear darling, did you inspire the Wild West charade we just witnessed?"

Displaying more than a touch of smugness, she said, "Paul sold me a bill of goods. Basic psychology, Roger. We dare not allow our visitors to feel they have anything remotely similar to the upper hand during their visit, but rather on their knees, begging for crumbs. Now, in the wake of Paul's welcoming reception, they and we both know precisely where we stand with respect to accommodating one another's wishes and demands."

"Logical!" I admitted. "Yet after that face-down, won't they tend to hang around forever out of spite? We don't *have* forever, Alexis. Not one nanosecond of flight testing will get done with *Argyrei* grounded out there."

"A distinct possibility," she said in an offhand manner. "On the other hand, perhaps that problem will resolve itself. I plan to open diplomatic relations with the press corps as soon as the second ship arrives."

"*Another* ship's en route to our fair asteroid? Wonderful, wonderful! When did you start keeping things from us? We're all full-grown adults."

"Don't be silly, and pretend you're miffed. Paul received a coded transmittal minutes before leading his crewmen men out to meet the Marsrats. I had no chance to tell you."

"Now, I suppose," I said in my least humble, most sarcastic manner, "we sit here and twiddle our thumbs for two months waiting for the second ship to arrive."

"Nowhere near that long," denied Paul, who was busy performing with fluid grace the contortions needed to divest himself of the pressure-suit, then stowing it on the airlock service area's bulkhead rack. "Some time ago," he declared, "the second ship in question departed Earth-Luna, its destination circum-Mars, then diverted trajectory to intercept 'our fair asteroid.' Our friends at home learned about it only hours ago."

I stewed about the revelation, let it sink in. "Okay, it's probably immaterial whether one shipload of snoopy reporters, or a dozen stops by to interfere with what we're doing. No matter how many eventually show up, we can't keep fending them off with fairy tales, bluff and bluster.

or anything else. Every laser-toting crewman, plus several techs, manned Paul's posse, and the newsies outnumber us three-or-four-to-one."

"A true statement," granted Nobbots. "Whether on a one-to-one ratio, or lopsided, the odds make no difference. Question is, do they know how many of us were *not* out there?"

"Not unless they're omniscient," it was my turn to admit.

Odds aside, however, the newshawks made no move to give up. We were bombarded hour after hour on all frequencies, including video, in a vain hope of raising a comeback. A few stray transmissions even came in via lasercomm. We acknowledged none of the traffic.

A half-dozen frustrating "days" later, with the starship primed and ready to leave the hangar for its pristine flight test, traffic control picked up faint backscatter from a still-distant vessel. Not long afterward the inbound arrived, grounding not far from *Argyreia*, and my beloved went on the air in a rehearsed production that would've done credit to a major holovision network. She stepped before the three-headed holovision mini-camera wearing special makeup, a tailored, pastel amber jumpsuit, and her most dazzling ivory-laden smile.

* * *

"Ladies and gentlemen of the press, permit me to introduce myself. I am Director of Project Demeter Dr. Alexis Lemmon, whose great pleasure it is to welcome you to Ceres. Allow me to tell you a few pertinent facts about our program, and then answer a few brief questions.

"Before we begin, however, please let me offer our most sincere apologies to Mr. Tollefson of Amalgamated, and those of you accompanying him on the premature visit to our operations base unfortunately shortened by a misunderstanding on our part. I'm afraid you all received an entirely erroneous impression, for we behaved in extremely rude fashion, when simply too busy at the time for cordiality. We acted in a frightfully boorish manner, and I do hope Mr. Tollefson and his associates will find it in their hearts to forgive us.

"Now then, a bit of background on Project Demeter . . ."

Her spiel, wrung straight from the numerous briefings she'd given in the past, was delivered in much the same way the Raja and I had heard it on that original magic night in Xanadu, except now she bent over backward to play up the program's romantic aspects, and downplay its technical *raison d'être*. Taken as a whole, there was much less emphasis on technobabble, and a whole lot more on the magical aspect of our goal, an overweening ambition to accomplish humanity's pristine starflight.

As she spoke, the largest split-screen holovision monitor tank in our rec room displayed inputs from a four-way linkup; Alexis herself in one, with the other three depicting ranks of newsmen and women aboard either of the grounded ships. Demeter's entire staff, seated in rows of folding chairs carried in from the commissary, followed orders to the letter, pretending to pay rapt attention to every word Alexis uttered. Manning the camera, Steve had made his setup cleverly, restricting the camera's field of view to make it appear as if Alexis faced a large audience, not a modest group of engineers and technicians. Concluding on a gracious note, she was deluged with a chorus of jabbered questions. Paul came to stand beside her. Lifting his hand, urged the newsies to settle down. "Please, ladies and gentlemen, one at a time."

The electronic yammer flooding into the commissary dropped a few decibels in pitch and volume. Once able to make herself heard, Alexis said, "At the moment, there is only sufficient time available for questions of a general nature. A channel will be left open after I sign off, and

you are all invited to submit more specific queries to which we shall be delighted to respond if and when afforded the leisure to do so. There is apparently on the order of three groups of you out there, and perhaps it's only fair to have a question from each group in turn, beginning with Mr. Tollefson, who has been so very patient with us?"

"Dr. Lemmon," asked Tollefson, "has your program actually been terminated?"

"Oh, quite, I'm so very sorry to say. We've already begun dismantling the base, although it is impossible to simply turn one's back and walk away from an installation of this kind. It will take time — several weeks, at minimum — to properly accomplish a multitude of tasks."

"Why," inquired a slender newshen in a second split-screen display, "give up so easily?"

"If I'm not mistaken," said Alexis, "that can be considered a lawyerly question, the sort of query attorneys willingly pose when they already know the answer." She pouted wistfully for a heartbeat or two, then revealed the fact that she was the one and only offspring of renowned nuclear fusion pioneer Alexander Lemmon, which should be a more than sufficient credential in the eyes of the press. Her sky-blue eyes and air of innocent intelligence aided in projecting the image of a wholesome, credible scientist. "Our program's farsighted sponsors," she concluded, "have come under intense fire due to numerous, extremely sensitive political issues. We felt it indecently incendiary to exacerbate the furor by resisting the U.N. order to cease and desist."

"Dr. Lemmon," asked an impatient newsie in a third display segment, "does that mean you won't contest the Third World sanctions now before the U.N. Security Council?"

"Of course we mean to fight for reversal of all objections to our vital program. The starship will be returned to the Earth-Moon System and mothballed until such time as Project Demeter will hopefully be approved, revived, and permitted to once again —"

"Where's your starship now, Dr. Lemmon? Will we be allowed to inspect it?"

"Please," my beloved said irritably, "I do wish you would allow me to finish answering one question before posing another. I should think our starship, a refitted fusion torch vessel, would be difficult to miss circum-Ceres. Other than the pair of vessels occupied by you ladies and gentlemen, it's the only other hull grounded in Ceres. But I do have one rather important announcement of concern to all. A brief shakedown flight is scheduled in, er . . . I should say shortly more than a dozen hours. You are all invited to come along and observe, although —"

"You saying your ship's ready to go FTL?" asked a surprised newsie.

Her grimace of annoyance let the audience know how she felt about again being interrupted. "Yes, a brief faster-than-light excursion will be undertaken by several of our personnel, while most of us remain behind to concentrate on base closure as well as ancillary activities, including preparations for a return to the Earth-Luna System. You may attend the initiation of our FTL shakedown flight if you wish, but be forewarned: *Argyre* and the other visiting ship appear to be fusion-powered vessels, and will therefore will be forced to stand off a specific distance for safety reasons. We shall be dealing not only with enormous energies, but also unknown and partially known forces. Should it prove achievable, the FTL burst will take place thousands of kilometers "above," to use an improper term, the plane of the asteroid belt, a starting point made necessary to trajectory free of most flotsam orbiting in the belt's locus."

The declaration earned a concerted murmur from the display monitors, and inspired the Raja elbow me in the ribs and whisper, "Clever chunk of bait, eh?"

"A cross between a shaggy dog yarn and a classic Trojan Horse lure. Who thought of it?"

“Me,” said Jeff immodestly.

“Raja, for that brainstorm, you get two attaboys and a gold star on your boot.”

“The twenty-four-trillion-dollar question while be whether the newsies decide to swallow the bait at one gulp, or gag on it.”

“Why wouldn’t they swallow it whole? I’d call it tasty, delicious bait.”

Looking indecently pleased with himself, Jeff said, “Hope you’re right.”

“Dr. Lemmon,” asked a newsman after the babble of his colleagues subsided a tad, “how would you rate the, er . . . shakedown flight’s chance for success? Your honest, best estimate?”

“I believe success to be in the neighborhood of eighty-five to ninety percent certainty.”

“Will starflight actually benefit humanity in as many ways as you say, Dr. Lemmon, or just one more attention-getting scientific advancement?”

Alexis did not have to feign shock; the color rise in her cheeks was enough. “Sir, it is not possible to believe that a serious question. How significant were the capture of fire by our remote ancestors, invention of the wheel, horticulture, the domestication of livestock, or every other major advancement, scientific or otherwise? Opening the universe cannot be other than the most monumental upward leap forward in all human history, bar none.”

She gamely fielded hot grounders for another quarter-hour — smart questions and dumb questions, searching questions and naive questions, meaningful questions and several I thought totally irrelevant. The newshawks and hens wanted to know why they wouldn’t be invited to enter Demeter’s base and allowed to poke around, examine the facility for themselves, perchance record what they saw and interview specific key people. One eager beaver asked why not one technical handout was available to include in the data sent sunward in their dispatches. Another wanted to know what we ate for breakfast, and one cluck wanted a copy of everyone’s personal profile, insisting that he’d be cashiered if he sent home a story devoid of human interest.

Throughout the Q&A session Alexis deported herself like a pro, enduring what I considered an ordeal with stoic dignity and equanimity, flashes of humor, and an occasionally brighter flare of pique. When she started giving shorter answers, Nobbots intervened.

“That will have to suffice for the time being, ladies and gentlemen. Dr. Lemmon and the rest of us are terribly busy. Should any of you care to submit further questions, we’ll be happy to log them in the order received, and then respond in that order if and when our work schedule permits. Thank you all for your interest in Project Demeter. On behalf of Dr. Lemmon and all of Demeter’s personnel, we thank you again for your patience and bid you good day.”

The second she was off the air, I grabbed her, whirled her around and kissed her. “What a magnificent liar you are!” I said with genuine enthusiasm.

“Why, thank you, Roger. Did I pull it off?”

“Brilliantly, in spades, doubled and re-doubled.” I kissed her again soundly, right there in front of everyone. “So we sucker them into chasing the wrong ship, then run the shakedown trial in the opposite direction. Slick!”

After a joyful nod, her delicate features hardened, making her suddenly looked intense, focused and determined. “Do you honestly believe professional news people will fall for the tall tale we told them?”

“Hook, line and shish-kabob,” I assured her.

“Oh, God! I hope and pray you’re correct, Roger. The great day has at last arrived!” She returned my hug with compound interest. “I doubt if I’ll sleep a wink tonight.”

About that she was also correct. I don’t think either of us so much as closed our eyes.

Sixteen - Faster Than a Speeding Photon

Five of us stayed in the facility while everyone else on Demeter’s truncated roster got into vacuum gear and used stagecraft to traipse out to Paul’s grounded ship in a purposeful file and then make a production of bravely clambering aboard to make the sucker play look much more convincing. The Raja and I waited in our open vacuum gear, the headpieces tilted back, watching in the traffic station radar monitor as Paul’s ship lifted off.

With Nobbots piloting, the ship departed without fanfare, boosting away from Ceres on a vector ninety degrees to the plane of Ceres’s orbit. *Argyre* and the smaller news ship came to life, trailing Paul’s flare at a discreet distance. The instant the last of three blips faded and died in the imaging radar display, we bolted for the assembly hangar, sealed our headpieces and hustled into the airlock chamber, where we had to wait impatiently while the pumps scavenged air.

The depressurized hangar was not yet open to vacuum. Chafing to get started, but feeling inhibited and clumsy in vacuum gear, Casey seated himself at the erector dolly’s controls. Steve keyed the actuator, and the hangar doors separated from their seals, rolled apart slowly and let a few residual molecules of air escape to vacuum.

Das and I climbed aboard the dolly, hanging on as best we could while Chew eased the tracked carrier through the opening and out onto the asteroid’s naked surface. Avoiding one small crater, he trundled the starship far enough from the hangar to ensure the liftoff splash would not damage the facility, swung around and parked.

Steve’s voice crackled in my headpiece speakers. “Give the bird forty degrees inclination, Casey.”

“That sufficient?” I could see the downturned corners of Chew’s mouth through the clear lens of his headpiece.

“Yeah, should be. We’ll break free with one short burst, burn easy while keeping this rock between us and the other ships, then floorboard it when we get far enough out.”

“Will liftoff burn-damage erector sling?”

“Might scorch it some, but no permanent harm. I’ll try to be careful.”

Conducted through the dolly’s structure, and my pressure-suit, the faint whine of servomotors accompanied a ponderous rise in the starship’s blunt prow as the erector dolly’s saddle lifted ponderously, stopping with the ship’s bulbous nose pointed prophetically at the jet black, star-speckled sky. Steve went up first on the rungs of the ladder attached along the sling’s ventral opening, between the buffer pads that seated the starship. The ladder had been designed for use in vertical launch mode, but even wearing vacuum gear it was a simple exercise for the pilot to go up hand over hand in Ceres’ flimsy gravity. He looked a touch ludicrous dangling by one pressure-suit gauntlet while cycling open the starship’s outer hatch, then entered the tiny airlock chamber barely large enough to accommodate an individual in vacuum gear. Chew followed Steve up the ladder and through the cramped lock chamber, Jeff went up next, and I brought up the rear. Alexis had boarded earlier, when the ship was still inside the hangar on the

dolly. As the lock's inner hatch cycled shut behind me, I began the usual dance and shuffle in the narrow companionway, where there was not enough elbow room to go through the contortions necessary to de-suit.

Steve had gone forward and belted himself into the pilot's couch. He got busy energizing the systems and started going through the preflight checklist. Casey went aft to man the special instrumentation installed to monitor and record n-space flight performance data. The Raja and I got in each other's way trying to stow our vacuum gear out of the way. After wrestling the cumbersome suits into a cramped compartment, we went forward to the flight deck.

Her blue eyes luminous with excitement, Alexis reclined next to Steve belted-into the astrogator's couch. She took my hand, squeezed it when I leaned over her shoulder.

"Okay, boys and girls," announced the pilot, "to the best of my knowledge this tin bucket is ready and able to fly." He reached down, cinched his restraint harness a notch tighter. "Stand by for acceleration in ninety seconds. Rog, you and Jeff had best go aft and buckle-in. I'll do a countdown over the intercom so you'll know when to get set for what comes next." Punching a sequence of three switches, he ogled the small radar display panel.

Practically nothing aboard the prototype was automated. Steve had to use both hands and his brain doing two, three or more things at the same time.

I followed Das aft, went to a foldbunk in the cramped compartment he'd selected, and strapped myself in. The Raja licked his lips, his expression one of singular fascination over what was about to happen, blinked and puffed his cheeks in the fixed chair across the compartment. "Ever been this excited?" he asked, his intense nervousness showing.

"Can't say I have. You . . . ?"

"Not even close. Think Casey's, uh . . . Think it will work?"

"We'll soon find out."

"Soon!" he echoed, husky-voiced, biting the word short.

The intercom came alive with a faint pop. "Casey, all secure back there?" Alexis wanted to know, her contralto registering a half-octave higher than normal due to the starship's oxy-helium environment.

"All okay," crackled Chew, his stolid baritone sounding much too calm under the circumstances.

"Roger, Jeff, you both strapped-in?"

"All tight here, Alexis. Let 'er rip!"

Steve came on the intercom. "Acceleration in ten seconds, and nine, and eight, and seven, and six, and . . ."

The starship's thrusters coughed once, then immediately shut down, inducing a brief surge of acceleration, then we were suddenly again weightless.

Steve swung ship soon as we cleared the rock, then burned twice more in short bursts at uneven intervals. We were in freefall another minute or so until the fusion torch settled into a steady rumble sounding louder than would have been normal aboard a ship of conventional size and configuration.

The thrusters died, and the ship went into freefall trajectory. Steve's voice came on the intercom. "Now I turn this show over to you, Casey. The rock's squarely between us and the two ships tagging after Paul. Our vector is precisely zenith relative to the plane of the Ecliptic."

“Give me minute.” Chew sounded inhumanly nerveless, as if he was begging off from answering the phone.

I waited, mouth cottony, breathing shallowly. Jeff mumbled something in Bengali, probably a favorite passage from the *Mahabharata*. I don’t happen to be the praying type, but maybe I should take lessons. At that moment I found myself wishing I’d known how.

“Ready,” said Chew in the identical, tranquil tone of voice. “Exactly like we rehearse, Steve. One hundred and eighty subjective minutes at half-gee, no more, no less.”

“Gotcha! Standing by to actuate,” responded the pilot. “Awaiting your hack.”

“All must now cross fingers,” declared Casey, his voice uncharacteristically weak. “Energize *now!*”

My bowels churned, flip-flopping in a different, more pronounced version of the queasy sensation we had experienced when Llogaar’s enormous ball swallowed Paul’s ship whole and sped us to Ceres gratis. The discomfort seemed a bit longer lasting than it had been, then a swelling surge of acceleration pressed me into the foldbunk’s pneumatic mattress.

A ragged cheer came over the intercom. I heard Alexis cry, “The stars, look! Weird blurs! Casey, you’ve *done* it!”

“Hustle forward, guys,” sang Steve. “This you’ve got to see.”

The Raja and I unbelted with feverish haste. We pulled our way “uphill” against the thrust-gee, grabbing hold of whatever was handiest at the rear of the cramped flight deck.

Alexis pointed mutely to the View Forward image in the small astrogation display.

Goggle-eyed at the sight of familiar star images transformed into rainbow-hued blobs, I noted how those at the outer periphery of the panel had grown short tails that crawled in an eerie, unnerving fashion.

“N-space photon strings propagate at velocity of cee,” explained Casey, coming up behind us, grinning like the proverbial Cheshire cat. “We move at unknown multiple of cee, so photon strings stack up, distort sensor input. We build n-space sensors, be rid of this mess.”

“Congrats, Casey!” Das was ecstatic. “Any way to estimate our velocity?”

Typically phlegmatic, Casey said, “Relative to what? Multiple of cee all one can say.”

The Raja shot a worried glance at Chew. “Shouldn’t you be tending your device?”

“Automatic timer cutoff,” assured Casey. “How long, Steve?”

“Thirty-two seconds,” the pilot told him. “Hang on when we slip back into normal space, and watch the view change.”

I clung to the rear of Alexis’s acceleration couch. Reaching back a moist hand, she clutched my moist hand. Her eyes sent a silent message even before she muttered, “Roger, do you *believe* this?”

“Not really. Not . . . yet.”

“Stand by for freefall,” warned the pilot, his forefinger poised above the fail-safe *Brennschluss* override switch, a manual backup to the automatic timing system.

My stomach did a reverse flip-flop, and once again we were weightless.

The star blurs spun together, condensed into tiny vortices which metamorphosed back into familiar diamond-hard glints.

* * *

“Swing ship,” instructed Chew. “Need to check inertial trajectory.”

“You’ve got it, Casey.” Steve precessed the ship about its yaw axis, rotating us one hundred and eighty degrees, and stuck his face in the hood of the theodolite. “Right on! Sun’s in the upper-left-hand quadrant if anyone wants a peek.” He obliged, scrunching to one side.

Casey got the first look. All he said by way of endorsement was, “Sighting look good.”

Alexis took her turn, then Das, and finally me. An exceptionally bright star gleamed in the theodolite’s narrow field of view. I could distinguish no planets, but then the instrument wasn’t a telescope. Prior to preflight inspection, the theodolite had been boresighted to precise alignment with the ship’s centerline of thrust.

“How far out are we?” I asked.

“Estimate hundred-sixty-five, hundred-seventy light-hours,” said Casey in the same tone of voice he would have used to greet a casual acquaintance.

I straightened, open-mouthed, my gaze locking on to the Raja’s wonder-filled brown eyes. Light, the universal Einsteinian constant, has a fixed velocity in vacuum of almost exactly three hundred thousand kilometers per second. I did a quick multiplication in my head; the answer rocked me to the root of my psyche. *Brief* n-space acceleration had propelled the starship out to . . . Well, on the order of one hundred and eighty billion kilometers from Ceres!

Awestruck, the Raja swore softly. “Plus four and one-half billion clicks per second!”

“At half-gee subjective acceleration,” reminded Casey. “Do lots better at full gee over long duration period.”

“Sonuvabitch!” Space-hardened though he was, the pilot sounded duly impressed. “Got to hand it to you, Casey. This tin bucket *really* steps out.”

I asked Casey impulsively, “How long will we stay out here?”

“No point staying. Few minutes for look-see, maybe. Why, Roger?”

“I’d like to go outside, have my own . . . look-see.”

“Whatever for?” Alexis sounded apprehensive.

“Oh, I don’t know. A strong urge to do more than just *see* it,” I said. “I want to feel it, wallow in it all around me. Please, Casey. I’ll hold up our return only minutes.”

“It’s thoroughly nonsensical!” Now Alexis sounded cross. “We should get back at once, stow the ship out of sight before Paul and the journalists return.”

“Five minutes,” I pleaded. “How about it, Casey?”

Expressionless as ever, Chew’s only response was, “Remember to hookup safety line.”

Encouraged, I pulled my way aft, contorted myself into the pressure-suit with frenzied, fumbling haste and sealed up. Das lent a helping hand, checking out the seals and hoses. “Love to go out with you,” he said.

“Next time, Raja. Be back in two shakes and a short spit.”

Das cycled the airlock. Heart pounding, I heard the faint, off-beat rhythm of pumps scavenging air, and wrinkled my nose at the pressure suit’s legacy — a ghostly odor of machine oil salted with a hint of perspiration, then realized the taint was my own. Nervous excitement had me sweating like a hard-ridden horse.

Hooking the safety line to a padeye in the lock chamber, I waited for the outer hatch to swing open, and slowly shoved off using both boots, launching myself into the interstellar medium, a realm ruled by almost nothing other than galactic cosmic radiation, and jolted to a sudden stop at the end of the safety tether.

I looked back toward home of Man from beyond what's known as the heliosheath, the approximate termination boundary of the particulate solar wind. Viewed from roughly two hundred light-minutes "above" the plane of the Ecliptic, the Solar System was by no means an awe-inspiring sight, in fact much less than spectacular. Other than an exceptionally brilliant star that had to be the Sun, it looked very much like any other sector of sky, a fairly small sector of circum-solar space I successfully blotted out with the thumb of one gauntlet.

Then I twisted about, gazing into the universe. Wish I could lie, and describe the monumental great thoughts that overwhelmed me with philosophic insight, but that would be gilding the lily. Although the view was awesome, I suppose the hundreds of hours I'd spent gazing into telescopic eyepieces, checking spectrographic printouts, analyzing the data embalmed on high-resolution digital negatives, or examining reams of other esoteric astronomical data had diminished my enthusiasm for the real thing. Still neither hi-res negatives, images reproduced in full-color, nor anything else could begin to more than hint at the true grandeur, the raw immensity for all practical purposes endless in every direction.

During what had seemed like endless years of study, plodding through a daily regimen of school, university, post graduate work, teaching, working in orbiting Galileo Observatory, et cetera, et al, I'd formed a habit of casually bandying the terms light-year and parsec with sublime disregard for their actual significance as metrics of extreme distance. Out there in the vast dark between the stars, a true appreciation of the mind-boggling scope of the universe washed through me, and with it a profound appreciation of the depths that went on and on and on as far as human sense enhancements could perceive, and an absolutely unbelievable distance beyond.

The sea of stars is dotted with countless islands, but they are *desperately* far apart when measured by puny human standards. Our starship — a tiny sliver of warmth and air currently adrift in the measureless, omnidirectional, all-encompassing universal abyss — had by current spacecraft standards traversed a truly awesome distance: light-weeks. Yet measured by the celestial yardstick, our starward shakedown leap amounted to an infinitesimal accomplishment, in fact less than a single, faltering, insignificant step into the great dark.

I tucked down my chin down, threw back the legs inside my pressure suit, and the resultant somersaulted me in a slow, headfirst rotation. I corrected, stabilized and looked past the starship's stern. Canopus caught my eye, a brilliant arc light among the southern constellations. I swung "downward" past Miaplacidus and the thick stream of star-dotted luminosity forming the edge-on Milky Way galaxy. There was the Southern Cross, to its right the gemstone of Agena, while "above" and a few degrees from Agena shone Demeter's objective, Rigil Kentaurus and its invisible companion stars. Beholding the brilliant yellowish trinary system as no other human being had ever seen it, closer by entire light-weeks, brought home to me the realization of what a totally short hop starward we had actually made in the scheme of things. At a velocity of three hundred thousand clicks per second, the photon string registering on my optic nerve still required fifty-two subjective months-plus to bridge the relatively "piddling" gulf separating our stop in cis-solar interstellar space from the bright light we had designated as Alpha Centauri, and the distant trinary system was the *closest* among myriad stellar systems and clouds of gas and all else orbiting the black hole at the hub of our galaxy.

Professional cosmologist or peanut farmer, the scale of the universe is not something the human mind can *begin* to grasp. I felt humbled, yet at the same time proud, and doubly determined that no one — nothing! — could ever make us give up Demeter.

Steve's harsh voice the pressure-suit's headpiece dispelled my reverie. "Boar-r-r-rd! This choo-choo's pulling out, Rog. Quit rubbernecking and heist your bod into the airlock. Get left behind, and you'll have one helluva hike going home."

Seventeen - Tollefson

When and if you learn to put up with his prickly personality, short-fused temper and smart mouth, et cetera, living and working with Steve still requires a hefty modicum of patience. Yet whether a dull specimen, or sensitive to his surface faults, shortly you begin to understand and appreciate that there is a lot more to the pilot than meets the eye, or ear. A phenomenon in his own salty way, he has mastered his chosen discipline: functional spacecraft operation. On our first semi-orbital swing he knocked the starship dead in space relative to Ceres, eased us down and grounded about sixty meters from the parked erector dolly. A triad of support jacks came down with barely audible thumps conducted through the hull. Servomotor whine diminished, gyro hum died slowly as the three-axis inertial system freewheeled.

Our first order of business was to hustled the starship back inside the hangar ASAP, but an unanticipated problem cropped up immediately. Under normal gee, the ship would have been precariously balanced on spindly automatic tail jacks, yet in Ceres' all but absent gravity field it was erect and fairly stable, which unfortunately positioned the airlock six meters or so above the asteroid's pocked, raddled terrain, leaving us with no obvious way to get down.

Alexis, Jeff and I were debating solutions and broke off when we heard the pilot chuckle. Steve's solutions are invariably Gordian. Suited-up in vacuum gear, he cycled through the ship's airlock and performed a simple exercise to which he gave no forethought whatever. He jumped, float ing down to a gentle landing on Ceres' pocked surface. Minutes later, the erector dolly's saddle nudged against the hull, and clamps firmly seized the ship in a gentle vise.

"Okay, snugged down tight, Casey," radioed Steve. "Retract the jacks."

I had stayed in my pressure-suit during the short return flight, and went out through the airlock next, while the others were getting into their vacuum gear. Das, Alexis and Chew were able to descend the dolly's ladder one at a time. The four of us of us moved aside, watching the pilot suspiciously as he lowered the starship to a horizontal attitude. With the dolly's single headlamp showing the way, we climbed aboard the rig, hanging on to the structure as Steve trundled the dolly slowly toward the base. Soon the roofline wedged itself above the asteroid' radically foreshortened horizon.

After rolling another twenty meters or so, Steve brought the dolly to a sudden stop. "See what I see?" he inquired, his voice ringing harshly in my suit's headpiece.

Jeff's voice blared even more loudly. "Who are they?"

"Let's find out."

We had purposely left the depressurized hangar's double-doors standing apart, open to vacuum. Silhouetted against the illuminated interior, four figures in pressure suits stood in an expectant row, an extremely dismaying sight. All base personnel except for us five shakedown

voyagers had purposely boarded Paul's ship to reinforce the purported flight's illusion of importance.

"Paul's ship may've grounded while we were otherwise occupied," said Alexis.

"Negative." Steve's harsh denial brooked no argument. "I caught the transponder blips of all three vessels while still in our approach swing. No way could he have beat us to the ground." He reenergized the dolly.

The quartet of pressure-suited strangers filed off to one side, making way for the burdened erector dolly to crawl past into the hangar, and confirmed our unvoiced suspicions: eight more vacuum-suited figures ranged along the hangar's opposite wall, one shouldering a portable 3-D video camera, panning the dolly-burdened starship as we rolled inside the hangar.

"Tollefson, Amalgamated News Services here, Dr. Lemmon. Have a nice flight?"

"Why, yes. Thank you for asking, Mr. Tollefson." I helped Alexis alight from the dolly. Das and the pilot joined us. His behavior typically phlegmatic, Casey had climbed into the erector dolly's saddle, from where he stared down impassively at the strangers.

"Mr. Tollefson, you and your associates," said Alexis, her transmitted voice stiff and formal, "were duly cautioned. This complex is private property, and you are not at all welcome in here." She placed a restraining gauntlet on the arm of the pilot's pressure-suit. It was us versus a number of armed men, one with a camera, and a third I took to be Tollefson himself, the newsman apparently in charge. Unhealthy odds to buck, but with Steve you can never be sure.

The journalist's easy chuckle told me how conscious he was of the newsie's advantage. "Really, Dr. Lemmon, isn't it about time to admit that we've been exposed to more than enough flimflam and sleight-of-hand parlor games. Why not relax and let down your hair? It may double your surprise to learn how sympathetic is the media in general to your venture."

Dimly through the lens of her suit's headpiece, I glimpsed Alexis's mouth set in the familiar stonewalling line I'd come to know. "You certainly did surprise us," she said evenly, "by invading our privacy. What made you decide to miss observing the FTL flight?"

"Oh, I'm fairly certain we did observe it." There was a note of satisfaction in Tollefson's declaration. "The landing, at least," he added thoughtfully.

"I beg your pardon?"

"I have a theory," announced the newsman. "Simplistically stated, the Tollefson Theory proposes that the more gullible members of various news teams were culled into snark hunting off thataway." He gestured with a gauntlet of his pressure-suit at the hangar's webbed ceiling. "In the meantime, you and these gentlemen tried out your FTL ship — yes, the somewhat smallish cylinder you just carted back inside the hangar."

"Our runabout . . . ?" Alexis' little laugh sounded easy, natural. "I can't believe your comment is serious, Mr. Tollefson. Our tiny runabout is something we use to scamper here and there among the numerous bodies co-orbiting Ceres, some of which, I'm sure you must realize, are rich in heavy metals."

"Sorry, good try, but no cigar, Dr. Lemmon.." Obviously enjoying himself, Tollefson sounded droll when he said, "Afraid the tall tale you're trying to spin won't wash. While not technically inclined, I do know enough about spacecraft to be suspicious of a 'runabout' powered by your father's praiseworthy innovation, nuclear fusion." He gestured toward at the starship's stern. "Besides, soon after that mysterious press release showed up out of the blue in Jesperson,

some of us batted the disclosure back and forth in the office, then went back to read it a touch more carefully. The large vessel that led *Argyre* and their associates' ship on a coney-catching expedition bore no resemblance to the vessel described in that press release."

"I must say you've made a thoroughly ridiculous leap of judgment," scoffed Alexis. "But then, by your own assertion you've admitted not being a technical-minded gentleman."

I could see the newsman's head wag behind the lens of his suit's headpiece. "Lady, you are good!" he said with feeling. "I mean it, *really* good! Catch is, I've been up against the best of the good ones most of my working life." Tollefson turned slowly and coolly surveyed us one by one. "Difficult to place these gentlemen in vacuum gear," he said, indicating the pilot, Das and yours truly, "but that press release mentioned Physicist K. C. Chew as the brainchild responsible for your Demeter venture, and if I'm not mistaken the gentleman seated in the saddle of your ship's, uh . . . rollabout carrier fits that template. How about it, Dr. Chew? Care to make a statement concerning starship performance?"

Tollefson had no idea what an exceptionally sturdy door he was knocking on. Casey's been stonewalling most of his adult life. He comes by it naturally, and didn't so much as blink, but glared redly at the newsies through slitted eyes, no doubt imagining how delightful it would be to chop all of them in thin sections.

"Nothing to say? Zilch . . . ?" Chew's lack of a response contributed to Mr. Tollefson's frustration. "Come off it, Dr. Lemmon! Don't tell me you're going to be stiff-necked about being found out. Hardly a sensible attitude, is it? After thinking things through realistically, you're going to want us on your side, believe me!"

Tollefson waited through the ensuing heartbeats of silence, decided to abandon the forced joviality tactic, he switched to soft-soaping Alexis into coming clean, saying with exaggerated earnest, "Listen, we're working press, not editorializing jackanapes. Open up, show us you're in the right, and that whoever's dynamited your program with that off-the-wall press release wears the black hat, and we promise to pitch for you one thousand percent. How about it?"

Another period of stony silence was broken only by the soft insufflation and exhalation of breathing transmitted over the suit-to-suit frequency.

Tollefson frowned. "Okay, call it an impasse. Ball's in your court, Dr. Lemmon. Guess we're doomed to stand here and admire each another until our air runs out."

Alexis had been quietly making up her mind. "Speaking of air," she said, glancing up at the gauge displayed in the prism viewer of her suit's headpiece, "my bottle shows only a partial charge remaining. Why not come inside, Mr. Tollefson, where we can be more comfortable? It will be a relief to get out of this suit, and I'm simply dying for a tube of tea."

"Uh-uh," denied the veteran newsman. "Not till we get a peek inside your, uh . . . runabout."

Steve edged forward, stepping in front of Alexis. "Won't happen," he said coldly.

"I suppose you'll try and stop us," said Tollefson.

"He'll have several large measures of help," announced a new voice in my ears. Led by Paul Nobbots, the crewmen from his ship filed slowly into the depressurized hangar. A half-dozen megajoule laser rifles covered the news team.

* * *

Tollefson's groan echoed hollowly in my ears. "Oh, please! Not the cowboys and indians charade again! Go ahead, order your weapon-happy goons to open fire." He gestured at the cameraman, who had moved backward several shuffling paces in order to better frame the entire scene. "As a rough guess, I'd say only five or six billion viewerviewers in a sunward direction will witness the massacre."

Alexis spoke up. "Casey," she asked, "will it be necessary to dismantle?"

"Talk later," said Chew.

"Secrecy is a bygone. Besides, with or without laser weapons they haven't a prayer of stopping us. Will it or won't it be necessary to dismantle?"

"Advisable," muttered Casey grudgingly. "Must re-do lab-set of specific control circuit components, plus thorough inspection. Flight test instrumentation must also come out."

"Very well. Steve," she instructed, "seal the hangar, and bring up pressure and temp. We'll want the ship back in its assembly cradle soon as the riggers can work in here."

"Check."

"Paul," she continued, "can you entertain these other gentlemen for a while? I should very much like a private word with Mr. Tollefson." Receiving unspoken agreement from Nobotts, she invited, "This way, if you please, Mr. Tollefson."

"Dr. Lemmon, your least whim is my command," said the newsman drily. "Anything sounds better than dodging concentrated laser fire."

The Raja and I trailed Alexis and newsman, going through the lock chamber in pairs, and into airlock service compartment pressure, where all four of us began desuited.

Shucking out of his vacuum gear with practiced ease, Tollefson emerged as a rawboned, distinguished looking man I judged in his middle to late fifties. Minutes later he accepted a squeezetube of coffee laced with a tot of brandy and settled back in the lounge, a faint smile playing at the corners of his mouth. "Mind if I ask what caused you to change your mind, Dr. Lemmon?"

"Principally," she said, "your remark about leaning toward our side of the argument once all the facts were on the table."

The answer seemed to satisfy Tollefson. "Fair enough. I meant it, so let's cut straight to the chase. Who gave out that news release? Who's the opposition, Doctor, uh . . . ? Mind if I call you Alexis?"

"Oh, by all means please do." Looking distraught upon hearing his question, my lady love's underlip curled. "We have met the opposition, to borrow your term, exactly twice. We have no idea who it . . . they are, where they are from, nor as importantly who and what they may represent."

Tollefson frowned and pulled the squeezetube away from his lips. As Mars bureau chief for a major news service he was a good listener, but also far too professional a journalist to ever swallow her statement. "One or more groups of militant Third World terrorists, I assume."

"No, the so-called opposition is not . . . of Earth."

"Oh?" Tollefson paused to deliberate. "I thought we'd agreed to dispense with games," he said, exuding unalloyed sarcasm. "I may be an oxygen-breathing outsider who enjoys working among the wild and woolly Marsrats, but I damn sure know how loudly they'd cheer in unison if and when you and your team managed to bring home the stars. That goes double for the Loonies,

who in my estimation would match the Marsrats' cheers decibel for decibel. What the hell! As civilization's technocrats, the engineers, scientists and techies living and working in Luna would get sore throats yelling huzzah! over Demeter's success. What kind of song and dance is this 'not of Earth' routine?"

"I'm very much afraid I must insist it's the bald truth," she said calmly. "The bitter truth, might be even more accurate. That press release allowed you to hear only a few bars of the music, while the lyrics are . . . You will surely think me quite mad if I simply blurt it out, but you've given me no choice. The 'opposition,' to again borrow your term, is of neither Earth, Luna, Mars nor any other solar body."

Tollefson frowned. "Which narrows it to . . . nowhere!"

"Elsewhere," she amended. "I warned you about thinking me mad if —"

"Forget that angle," he interrupted. "If I'm not mistaken, you're referring to the peculiar confinement of you and a number of your associates in the Sinus Iridum Medicenter psychiatric ward. We know all about that."

"Allow me to contradict you, Mr. Tollefson. You do not know *all* about it."

His frown deepened. "Okay, in that case lay down your cards face-up. I pride myself on keeping an open mind. I'm also pretty good at deciding what flies, and what doesn't."

"As you wish." Alexis cast an anxious glance at Jeff and me, inhaled deeply and pitched in, beginning with a capsulized account of Mr. Smith's original appearances in Earth-Luna Station, and then twice more out in Galileo Observatory. She proceeded to work her way into the saga of Stinky the Spice Monster one tentative tidbit at a time, telling the tale straight from the cuff, neither embellishing the account or leaving out anything significant.

The picture of mixed attentiveness and overriding puzzlement, Sig Tollefson nodded affirmatively when I offered a refill on his tube of brandy-laced coffee. By the time Alexis finished her spiel, he was still acting outwardly puzzled, but I intuited a change in him, too. "Alexis," he said slowly, "I hate to tell you what an indecently improbably and implausible story that would be to attempt selling to a hardheaded editor, but maybe it can be done if I exercise my very best hard-sell technique and every last millimeter of persistence."

"You . . . believed her?" I must have sounded incredulous-plus.

"Not one thousand percent, no." Tollefson flashed an infectious grin. "There is no point trying to explain how it came about, but over the years I've developed a talent for adding two and two pretty damned fast. The truly outrageous sums of money, plus the energy and time required to put this program of yours together way to hell and gone out here in Ceres, not to mention the credentials of participants like Dr. Chew or you yourself, has convinced me you had something of extreme value to sell, else you could never have interested any of the, uh . . . moneyed potentates or highly placed politicians of Demeter's ultimate downstream validity. Then there was this weird circumstance of numerous scientific and technical types with no prior history of emotional problems suddenly dumped into a lunar psych ward. That alone smelled of fish long dead in the noonday sun, so much so that I had it checked out by a pair of shrewd investigative reporters from our New York office. They turned up the fact that a retired world-class shrink named Chamberlain was involved in the mass release of all you, er . . . patients. Frankly, an explanation involving telepathic aliens from the stars is . . . Well, it would no doubt sound like off-the-wall nonsense coming from ordinary folk, but not from an elite celebrity of the

scientific community like yourself, Alexis. All I'm damn near afraid to say is that what you told me makes more sense than any mundane rationale I or anyone else could come up with."

"You are a gracious gentleman, Mr. Tollefson. You can't imagine how delighted we are to hear you say that," declared Alexis, a tear of gratitude shining in her light blue eyes.

"Now then," declared the veteran journalist, "tell me true. Was your test flight a success?"

His question wrought a radical change in Alexis. "A total and utter triumph!" she said, absolutely glowing. "We depart for Centaurus in a week or ten days."

"Glory be!" Tollefson shook his overly long mane of salt-and-pepper dark hair, puffed his cheeks and said, "Mind if I dump the coffee and switch to straight giggle water? Right now, I'm badly in need of a hefty belt."

I obliged and decided to follow suit, so did Alexis. A teetotaler, Das declined.

"Cheers!" Tollefson held his squeezetube aloft. "Here's to Demeter! No, make it a toast to each and every one of you Demeter folk, and to the biggest by God story of modern times!"

"Mr. Tollefson," said Alexis, "may I ask a small favor?"

"Anything in my power." He said, sounding ultra-sincere.

"You called my tale a 'hard-sell' to any editor. When it came to making your editor or another believe in the authenticity of my farfetched tale, I'm forced to tell you it is absolutely the *last* thing we would encourage you to do. In fact, we would appreciate it immensely if you would agree to do precisely the opposite."

"*What?* What do you mean, the opposite?" Tollefson's surprise was unfeigned.

"We'd be ever so grateful if you would return to the *Argyrei* and 'sell' your colleagues on the fact that Project Demeter is a five-star hoax perpetrated by an aggregation of former asylum inmates. In return, I shall be delighted to reciprocate by promising to repay you with . . . Well, with something I'm sure someone like yourself will consider of inestimable value."

The gentleman I had judged to be damned difficult to dumbfound wore a thoroughly dumbfounded expression. "Whoa! Let me get this straight. You're asking me to help *shoot down* Demeter?"

"Precisely, Mr. Tollefson, in flames. A enormous 'white lie' is all we ask of you. It will solve the most perplexing dilemma we currently face." Alexis described our trepidations over Demeter's likelihood of inciting a war in the homeworld, and perhaps the unthinkable — a thermonuclear holocaust. She related the internal debate which preceded our decision to press on with Demeter at any and all cost. "You see," she concluded, "were the program to be thoroughly discredited in the press and media it would momentarily take the wind out of the Third World's sails, hopefully defuse the war scare, and also allow the news of what we 'wastrels' have been engaged in to blow over. Coincidentally, it would also give us an ample opportunity finish our work and be on our way."

Obviously still in shock, Tollefson regarded my beloved narrowly. "You'd really *do* it? he demanded. "You'd sacrifice yourselves, your reputations, for an unhindered chance to finish what you've started?"

"Gladly. No, I should have said *eagerly*," she told him. "Falling into temporary disrepute would set us free, but upon returning we may all become heroes."

“I should hope to say you’ll be heroes.” Tollefson whistled softly. “I thought I’d heard it all, but this is . . .” His expression one of utter disbelief, he broke off. “What sort of . . . bait are you dangling, assuming I would agree to run a blazer of that size on my colleagues and co-workers, let alone my employer?”

“Sell them on the fact that Demeter is manned by a flock of raving lunatics,” she said, “and I promise to grant you the exclusive story of humanity’s first starflight. A scoop I believe its called in your profession.”

“A beat,” murmured the newsman, gently correcting her. Obviously mesmerized by the notion, he grimaced. “How can I . . . ? What I mean to say is, how in the name of all that’s sacred am I supposed to pull off something *that* ditsy?”

“Why, I should think it would be quite simple,” Alexis assured him. “The ammunition we furnished today should certainly create a distinct impression of your veracity. Paul’s ship wallowed out there in front of an audience made up entirely of news people and crewmen, and refused to budge, much less streak away at faster-than-light velocity. I can easily imagine what sort of fairy tale you’ll have to invent for the newsmen who accompanied you out in the hangar.”

Tollefson shrugged. “No problem there. Those are *my* guys; they’ll do exactly what I tell them to do, no questions asked.”

“Wonderful! Manage it any way you see fit, Mr. Tollefson, to accomplish your mission. Have we a deal?”

“Oh, do we ever have a deal!” Sig told her, his enthusiasm unbridled. “Let me go round up my guys, haul them back ot the ship and get busy.” He rose and said, “When are you leaving for . . . It’s a really tough line to say with a straight face. When’re you slated to pull out?”

“Within a few subjective days — a week, hopefully less. We mean to depart the instant Dr. Chew finishes inspecting and re-calibrating his equipment. Some minor adjustments are also needed, and the test instrumentation must be removed. Casey also has to oversee the proper, more permanent re-installation of his system.”

Tollefson said, “I wish you luck, lots and lots of it, and in fact all the luck there is. I’m betting you’ll make it, Alexis.”

All things considered, it was an excellent wager, yet one Tollefson would have lost.

Eighteen - Juggernaut

Our newest, most vital confidant proved himself not only an ace investigative journalist, but a top-notch scam artist. During every subjective passing “day” after he and Alexis made a deal we intercepted a plethora of derogatory coverage dispatched sunward from the newsies in either of the visiting ships. The anonymous press release that spurred the transmission furor had been called a hoax by Tollefson, who labeled a search for cheap, sensational publicity. Project Demeter, also apparently a hoax, he’d reported to be directed and staffed by peculiar individuals, many of whom not long since had been patients in a lunar psychiatric hospital.

Telepix of the first encounter between Paul’s armed crewmen and Sig’s team of reporters had no trouble portraying we raving lunatics us as armed and dangerous, rabidly erratic weapon-wielding savages. All things considered, Sig did a superb job of dynamiting Demeter and everyone directly associated or loosely connected with it.

At any rate, four subjective “days” after our shakedown flight, the smaller news ship’s flare briefly lit the bare rock of Ceres and burned sunward, leaving only *Argyrei’s* occupants to sit on whatever might remain of the purported “story” until it either gave birth to any additional booby-hatch stories, or died an unnatural death.

Once the smaller ship and its complement of frustrated newsies had pulled up stakes and departed, Tollefson came back on a solo visit. We greeted him warmly at the airlock and held a clandestine victory celebration, during which everyone literally and figuratively patted him on the back. Conducted on a grand tour, he was shown through every nook and cranny of the facility, including the lab, where Casey’s complex n-space electronic units lay scattered across three or four workbenches undergoing final tweaks and calibrations, not to mention several minor fixes deriving from test instrumentation data returned on our shakedown flight. The starship’s tokamak and power systems were also undergoing meticulous inspection, and imperishable stores for the impending starflight were being stowed aboard.

Extra-polite throughout the show-and-tell session, Tollefson made appropriately interested noises while he looked everything over, but admitted to a lack of background knowledge which dimmed his appreciation of what he saw and heard. Alexis invited him to stay for dinner. In our quarters, she and I were changing clothes when the alarm klaxon began to honk throughout the complex — a sound I’d hoped to never hear again.

“Dear God, now what!” Alexis dashed to the intercom panel. Unable to raise anyone in the traffic station, she became frantic, depressed the intercom switch and held it down. Finally Steve’s petulant voice crackled from the speaker. “That you, Alexis?”

“What is it?” she demanded.

“Sweep scan aboard ship picked up another of those screwy blips. Now I’ve acquired it here in traffic control. Could be Stinky, could be Llogaar, could be Santa Claus, no way to tell yet. Whatever’s out there is way to hell-and-gone — seventy, eighty thousand clicks or more directly to the zenith, and holding stationary. Come see for yourself.”

“Be there in a jiffy.”

Passing the commissary, Alexis decided to stop and collect Tollefson. Sig’s eyes grew big and round when he learned who might be getting set to pay a call.

When the three of us charged into the traffic control compartment, the pilot dipped his chin toward the radar display tank. “Sitting there right above the base, doing zilch,” he reported. “Same hide-and-seek, in-and-out games as before, except seven or eight minutes ago it firmed into a solid return.”

“So I see.” said Alexis, “Where’s Paul?”

“Still aboard ship. He was busy doing paperwork when the watch officer alerted him to the blip. He called, gave me the word on what quadrant to scan.”

“Is he coming back inside?”

“Didn’t say.”

“Let’s kill the klaxon, Steve, save it for a real emergency, not cry wolf.

“Check.”

The instant the klaxon stopped honking I became aware of a high-pitched whine barely on the threshold of audibility. Steve must have heard it also; his sharply indrawn breath preceded too calm an utterance. “Behind you, Alexis . . .”

Something was there, a tiny sphere glowing with dull radiance emitted the very faint whine. Gyrating aimlessly in midair between the radar tank and the communications console, it suddenly brightened into incandescence, and the monotonal telepathic “voice” of Stinky the Spice Monster erupted in my head.

Dear children, your foolish efforts force This One to express boundless admiration for the resourcefulness and determination you demonstrate, in addition to your dedication and persistence, which is utterly beyond belief, yet in the final analysis naught but a deplorable misuse of your bountiful creative energies.

What you strive so desperately to accomplish simply cannot yet be realized. Your ingenuity in evading misadventure and calamity, while both inordinate and surprising, compels This One to initiate vastly harsher measures from which there can be no hope of extricating yourselves. Were This One to lack compassion, no warning would be forthcoming. Alas, while in no way deserving of such consideration you are indeed fortunate to be dealing with a true intelligence whose basic instinct is kindness and indulgence toward all emergent primitives.

Now heed This One’s counsel with utmost care, my children. In precisely sixty of your minutes — neither a single tick sooner, or later — a high velocity object of appreciable mass will intersect the body where you so naively persist in your struggles to violate your place of natural existence, and unfortunately where your futile endeavor shall fail to bear fruit, since the habitat and all it encloses shall be expunged. The time allotted, while more than adequate, is destined to serve its purpose only if every individual being among you flees with precipitous haste. Hear again This One’s grave warning, and take heed: flee in order to save yourselves, or perish. The outcome is predictable, and the choice of flight or truncating your existence is entirely yours.

The tiny glowing sphere dimmed abruptly, and vanished.

* * *

“Double-dealing sonuvabitch!” railed Steve. “Gloves are off, Alexis.”

“What . . . was it?” asked Tollefson. “I heard it, but. . . What did it mean by —?”

“Not now!” Cool and confident, fully in command of herself, Alexis ordered Steve to hit the general alarm again, and he slapped the actuator. “See if you can pinpoint an incoming object on radar,” she added, “and alert Paul that we’ll all be coming aboard ship.”

Steve bulleted over to the imaging radar tank and twiddled the controls for a few seconds. “Looks to be good-sized, a few hundred meters or more across and holding a constant bearing, closing with us at eight or ten kps.”

Alexis wasted no breath. “We evacuate now, now, now!” Her fingers swept over the rows of switches, simultaneously depressing every one, plus the recorder key. “Attention, attention all personnel!” she cried. “We are under attack. This is an extreme, repeat *extreme* emergency. The base is to be evacuated at once, without fail. Drop what you’re doing and go now, now, now!”

Cursing in a fluid monotone, his features livid, Steve shoved away from the radar display tank. “Filthy ‘This One’ bastard caught us with our britches at half-mast. If only it had given us time to —”

“Too late for laments! Attention all personnel!” she announced. “This is not a drill, *not* a drill. Forget your personal belongings. Go at once to your pressure-suits, and stand by at the main airlock for transportation to the ship. There is enough time *only* if you act quickly, in a determined, orderly fashion. Go now, now, now! Your lives depend on it. Go!”

She spent few seconds more programming the recorded message to repeat endlessly, then whirled to face me and the newsman. “Tollefson, have you a way back to your ship?”

“Uh, no. Not without calling first. They dropped me off, and I told the captain —”

“No time for that. Go with Shore now. Move, both of you! Help him into his vacuum gear, Roger, and send him to the main airlock. Once you’re suited-up yourself, work your way through the complex back-to-front. Make certain no one gets left behind. I’ll have a trak-truk standing by to pick you up outside. Go!”

I breezed out of there with Sig trying to keep up, but he’d been Marsbound too long. “Forget chasing after me,” I called over my shoulder. “Grab your suit; it’s in the airlock service compartment where you came into the habitat. Exit the lock chamber with whoever else is there, then either catch a trak-truk or hoof it back to your ship.”

I ran off, leaving Sig looking after me open-mouthed, and came within a hair of knocking down Henry Ogilvie as I rounded into the corridor leading to the hangar airlock service area where my vacuum gear was stowed. “Suit-up, Henry,” I told him. “Start at the rear of the living quarters and work your way forward. Shoo everyone toward the main lock. I’ll take care of the shop, labs and hangar. Make sure you don’t miss anyone. Move!”

“Gotcha, Rog!” Henry took off in the opposite direction.

I whistled through the airlock open on both sides into the pressurized assembly hangar. It was deserted, but not silent; the honking klaxon diminished in volume each time Alexis’ recorded abandon ship message blared from the speakers, repeating in an endless loop.

My pressure-suit and a hefty one I took to Clancy’s were the only ones secured in the rack. I spread my suit on the floor, rolled into it and performed the usual double-jointed contortions needed to tuck myself inside and seal up. Leaving the headpiece fishbowl lens cocked open against the detent catch above the suit’s neck dam, I checked the air bottle charges from long force of habit. Only twenty minutes of air remained in the right flask; the left gauge read “1/1” — fully charged.

Trying to move fast indoors clad in cumbersome vacuum gear makes for clumsier, slower going than Alexis’ extreme emergency warning called for as I chugged up the ramp, stuck my nose in the starship’s open hatch and yelled, “Anybody here?” Zero response. The machine shop was also deserted. I peeked into the locker room, the showers, the adjoining john, then yelled my way through the electronics fab area, which also proved deserted, then ducked into the test lab and stopped short.

A trak-truk was drawn up close to the bench. Casey Chew was loading electronic units and handfuls of loose printed circuit board assemblies in the trak-truk’s cargo bed.

“Drop all that,” I shouted, “and get into your suit. Not many minutes are left.”

“You go,” he said, depositing one unit after another into the trak-truk. “I catch up.”

“Chrissake, there *isn’t* any later! We have to abandon everything, and scoot. Screwing around, trying to save that gear could cost you your life.”

“Equipment is my life,” was Chew’s succinct reply.

“Don’t be so damn stubborn! Come on, grab your suit. Let’s go!”

“Out of way, Roger! Not want to hurt you.” He gently placed a black box housing the second stage excitation sequence on a foamed plastic mat lining the trak-truk’s flatbed.

I considered hitting him over the head, dragging his obstinate ass to the main airlock. It was a silly notion, but I wasn't feeling silly. Yet do-gooder stuff like that happens only in bad holovision dramas. "Okay," I said, giving up. "You go suit up. I'll finish loading. Hurry!"

He clapped the shoulder of my p-suit to let me know what he thought of my scheme and exited the lab at a wobbly shuffling, gliding trot. I threw stuff into the flatbed helter-skelter, giving no thought to damaging anything, and concentrated on getting it all aboard ASAP.

Casey came back wearing vacuum gear. The only item left to be loaded was the matrix module, a bulky unit half the size of a desk. Under Ceres' next-to-nothing gravity, the two of us had no trouble wrestling it aboard the trak-truk. I banged the tailgate shut soon as Casey threw some additional matting over the load.

Then sheer frustration almost made me to hit him over the head and drag him out of the test lab. He had paused to calmly cinch a restraint tarp over the whole mess.

I knew time was running awfully short. At least forty minutes or more had easily elapsed since I'd dashed out of the traffic station, but trying to accurately gauge times passage is close to impossible when your heart's racing and you're busy trying to do several things at once.

Casey drove, careening the trak-truk through corridor after corridor toward the main airlock. I closed and sealed the lens of my headpiece while we waited for the lock to cycle open, waited some more for the green light to wink on. Casey trundled the trak-truk inside the big lock chamber, and the pumps began scavenge air — one last time-waster we didn't needed just then. Casey punched the override button, saving precious seconds by spilling to vacuum what little air remained in the chamber.

The outer hatch finally cycled open. Our trak-truk emerged at the exact instant the flare of Paul's ship blossomed in the near distance, then lifted off on a dazzling pillar of fire.

No way could I bring myself to blame Paul or the others; they did not have the luxury to stop and count noses, nor most certainly wait for stragglers. The ship's liftoff cued me. The killer rock had to be close.

"Missed the boat," I told Casey suit-to-suit.

I couldn't see his features due to the reddish glow of the ship's flare reflecting on the lens of his headpiece, but sensed his characteristic nod. "Go like hammers of hell! Get clear."

It was a wonderful notion, but also wishful thinking. Trak-truks are electric-powered turtles; they don't go like the hammers of anything.

I cranked back in the passenger seat, craned to look directly overhead. Gleaming stars aplenty dotted the velvet blackness, though none seemed to be moving — no surprise. Trying to pick out a rock coming down your throat at umpteen klicks s per second is an exercise in futility.

We jolted and bounced in the trak-truk pushing over Ceres' very short horizon, getting away from Demeter's doomed facility as fast as Chew could pour wattage to the damn trak-truk.

My headpiece speaker crackled. "Roger," said Alexis, here voice brittle. "Where are you, Roger? Can you hear me?"

"Copy," I said. "We're taking the scenic route, Alexis. Don't fret, we'll make it."

The signal processed by a few grams of a pressure-suit's integral walky-talky transceiver circuitry is fairly weak to begin with. I doubted whether Alexis would be able to pick up anything that feeble trying to punch through the ion sheath formed by the departing ship's exhaust, but it and the others making up Demeter's personnel were still relatively close.

“Us?” she responded, her voice weaker and slightly ragged. “Who’s with you?”

“Casey Chew,” I told her. “But I wish he’d drive more like Casey Jones. Hang around and collect us after the splash, promise?”

“Oh, Roger! Whatever possessed you to . . .” She must have reconsidered the sharp-tongued reprimand I knew would’ve come next under normal conditions. “What happened?”

“Casey and I salvaged the n-space operational gear,” I told her.

Her signal was weakening fast. “Equipment can be rebuilt,” she said. “You two are absolutely irreplaceable.”

“My sentiments exactly. I love you, Alexis.

“L-love you, Roger.” I could barely hear her.

“How much time’s left?” I asked.

“I . . . it’s a matter of . . . None . . .” Her voice was very weak.

The asteroid Ceres heaved convulsively beneath our trak-truk. The last thing I remember was a giddy impression of flying through space.

Nineteen - The United Nations Runaround

Nothing was left of Demeter’s operations base. Humanity’s first starship was dust, and so was Demeter’s dream. The kilometers-per-second impact of an object massing untold thousands of metric tonnes left a ringwalled crater, an impressive new astrobleme on the already pocked and scarred face of Ceres. Later I was told the wound still glowed redly around the edges when Nobbots’ ship and *Argyreï* lit up and headed sunward. It must have been some sight, if one I never had the chance to see.

Stinky’s coup de grâce, administered in the wake of the “kindly, indulgent” warning offered by the hideous thing that described itself as “a true intelligence” was exactly what I had come to expect from the alien monstrosity. I hate to think what would’ve happened if the smelly, “truly intelligent” bastard had been sore at us.

The final curtain on Demeter came within a thin hair of also ringing down finis on Casey Chew and yours truly. Ceres is a stony-metallic asteroid, technically speaking made up of an integral mass that tends to “ring” like a bell when rapped sharply. Stinky’s parting shot rang Ceres’ gong loudly, creating sinusoidal surface ripples similar to those produced by an earthquake. The first and strongest of these energy-laden waves picked us up, trak-truk, n-space gear, and all, launching the hodgepodge into three separate suborbital trajectories.

I was damned fortunate to end up with nothing more serious than abrasions, contusions and a concussion after being hurled a few kilometers before bouncing and rebounding and tumbling to a halt in a tangle of arms and legs. Unconscious at the time, I recall none of this excitement.

We nearly lost Casey, however. Ejected from behind the trak-truk’s joystick, he sustained a fracture of the right femur and then, like me, flew through vacuum like an angry bird and first impacted on his life support backpack and air flasks, adding a broken collarbone, a fractured scapula, and a cracked headpiece lens to his other injuries. If not for Paul’s first perceptive inspection of Casey after locating him, he would have become the victim of explosive

decompression. Fortunately, the rescuers got to him an hour or so before they finding and collecting me lying crumpled few kilometers beyond the damaged trak-truk.

Paul's eagle eye spotted the cracked lens of Casey's battered pressure-suit headpiece, and before daring to move him and bring him aboard ship he used special sticky-backed tape from the suit's emergency repair kit to reinforce Chew's faceplate lens. The first aid helped ensure the lens' integrity barely long enough to tote Chew inside the ship's airlock where, with pressure rising the lens actually blew out. Just in time Paul hit the emergency override, opening the chamber to the ship's internal pressure. Casey suffered ruptured eardrums and pulmonary bleeding, but luckily was not exposed to partial vacuum long enough to do him in.

Dr. Salmo had begged off from joining us on our repeated expeditions to consummate Demeter, and we therefore had no medic aboard Paul's ship. Transferring Casey to *Argyre*'s sickbay was discussed, but doing so would have presented a major secondary problem. Except for Amalgamated Bureau Chief Tollefson, and two other oxygen-breathers living in quarantine aboard the Martian ship, there was no practical way to care for Chew in a carbon dioxide environment with only a pair of small oxy-nitrogen isolation compartments aboard. Even if that had not been the situation, Alexis refused to hear of allowing Casey out of her sight, assuming full responsibility for his recovery.

The ship's surgeon aboard *Argyre*, a garrulous carbon dioxide-breathing Marsrat, made a snap triage judgment and went straight to work on Chew before doing what he could for me. Catch was, he had to perform his medical miracles encased in a clumsy environmental isolation suit, a situation he termed, "close to impossible." Casey stayed under intensive care, remaining unconscious more than twenty hours, his sustained critical condition bringing about an ancillary dilemma. He eventually solved what remained of the medical dilemma by coming around.

Demeter's base, evacuated on a slim one-hour notice, meant that no one had come away with so much as a toothbrush — no clothing, personal treasures of any kind, nor much more importantly any foodstuffs. At Sig Tollefson's insistence, *Argyre*'s skipper agreed to divide his ship's limited rations and share them with us. But every hour the two ships spent grounded or circum-Ceres meant that much additional hunger during their respective homeward transits.

When tentative inquiries were posed about how he felt, Chew's first words assured us the Marsrat doctor's efforts had been fruitful. "Is N-space equipment okay?" he had demanded in no uncertain terms. Despite repeated confirmations that his damaged, ultra-precious electronic gear was safely stowed in the ship's forward hold, Casey refused to let go of his skepticism until subjective weeks later, when we were in freefall trajectory and he had gained enough strength to be ambulatory. Pulling himself forward with one hand, he assured himself of only the superficial sustained by his precious black boxes and circuit boards.

Saying farewell to the *Argyre* and Sig Tollefson, we had voiced our profuse gratitude, thanking the captain for the size of the helping hand he had granted us. Steve had precessed the ship about its yaw axis, aimed it sunward and we'd burned away from Ceres forever, entering the first lap of what proved to be a hungry, melancholy trajectory. Casey was especially uncomfortable and cranky under boost; acceleration gee-loading multiplied the pain of his injuries, and made it necessary to heavily sedate him during the early stages of the homebound transit. Fortunately, we'd had the counsel of *Argyre*'s flight surgeon to lean on. The doctor had left comprehensive instructions for Casey's care during the recovery phase.

Shortly before and during the rescue operation to collect Chew and me, our survival had been considered unlikely. Once found, however, and that fate nixed, everyone including us had been too despondent to stew about the disaster or hold any sort of requiem for Demeter. Later, however, faced with sixty-plus “days” of very short rations, ennui and second-guessing brought about sieges of heartfelt recriminations, second-guessings, and a communal, abysmal sag in spirits, all of which caused the shipboard atmosphere to degenerate drastically. Alexis and Nobbots brooded quietly, neither having much to say about Stinky’s Final Solution, though it was obvious from their collective demeanor how deeply both grieved over the consummately delivered alien blow below the belt that had spelled quietus for Demeter.

Personally, I didn’t feel all that blue about losing the program. I was damned happy to be alive, and all in one piece. A near miss by the Old Man with the Scythe makes you appreciate how much worse is the alternative to life’s sorrows and defeats. That’s not a platitude either, only the plain, unvarnished, honest-to-God truth.

The Raja and I yakked for hours on end. We played chess, took part in an endless round-robin poker game with Steve, Henry Ogilvie, and one of Demeter’s electronikers, Jerome Pickett, an interesting cuss who hailed from Louisiana’s bayou region, who must’ve learned to play a better than fair brand of poker not long after he learned to walk. The game went on for subjective weeks, and the stakes were booze. We may’ve have had little to eat on that gawdawful homeward trajectory, but excellent liquor was to be had for the asking. I confess to spending the final subjective weeks of the dismal transit in a rosy alcoholic fog.

We stayed in contact with *Argyre* until she fell out of transmission range shaping a fast trajectory toward Mars. During the final contact Sig Tollefson issued a warning, informing us what we could look forward to in the way of a homecoming celebration.

Good deeds hardly ever avoid punishment, and seldom generate sought-for results. It seems the propaganda line Sig had worked so hard to sell — his “favor” to Alexis — had backfired with a vengeance. Third World leaders, media pundits and agitators were once again up in arms over our impending return, in one breath demanding our scalps be forfeited for daring to perpetrate a bald-faced scam like Demeter, and in the next breath calling for our imprisonment pending mass execution. The Third Worlders had become doubly enraged over the fact that we’d blithely squandered an appreciable fraction of the world’s dwindling resources on a pluperfectly fanciful confidence scheme like, of all things, *starflight*!

We entered the deceleration phase of transit feeling trapped between an enormous rock and a hard place dense as a diamond. Alexis spent hours at the comm console, arguing with one official or another, doing her best to soften the sledgehammer blows said to be awaiting our arrival. She glumly reported that the United Nations Organization, for all practical purposes a quasi-global government, was deeply and thoroughly pissed off to the hilt. Later that turned out to be a massive understatement.

Steve coordinated our approach with Earth-Luna’s traffic control station, and docked the ship in the nadir berthing stack. The main airlock cycled open, admitting what seemed like a full legion of green-uniformed U.N. Special Police. Paul’s ship, supplied by our benefactor nations for the duration of Demeter, was impounded forthwith along with the entire inorganic contents, not counting Wellington, the surly tomcat rescued by Henry Ogilvie.

We hungry, bedraggled Demeter survivors didn't get off quite that easily. We were not impounded. We were arrested.

* * *

One of several reforms instituted by the Napoleonic Code during the adolescent French Republic had been written to correct a grievous abuse of *Liberté, Egalité, Fraternité*. Citizens could no longer be arrested at the whim of a local magistrate, tossed into a dungeon and permitted to rot forever without being charged with a specific crime. Sad to say, this advance toward libertarian enlightenment missed a stroke somewhere along the way. After enactment, French citizens could be arrested at the whim of a local magistrate, formally charged with a crime, *then* tossed into a dungeon and permitted to rot forever without benefit of a trial.

As a group, our grossly disfavored crusaders who had devoted themselves to to serve the now-defunct Demeter Program began to feel heartfelt sympathy for the Count of Monte Cristo's plight. Our collective "offense," deemed neither civil or criminal, but political, became a hot potato each and every pol or member of the judiciary with superior survival instincts juggled adroitly, and promptly dropped. Over a period of weeks the Demeter football was booted from one end of the U.N. Attorney-general's office to the other, eventually ending up in the empyrean chambers of the U.N. High Court after missing absolutely no stops along the way. We were held incommunicado, denied habeas corpus, and for all practical purposes confined *sans culotte*, having fled the asteroid with little to wear other than what was on our backs when that truest of all "true intelligences," Stinky the Spice Monster, made good on its "kindly, indulgent" warning.

Our scrambled multinational backgrounds further complicated the jurisdictional hassle, bollixing the collective situation in which we found ourselves stretched six ways from the middle, not to mention infecting officialdom with a virulent case of fits and sulks homicidal urges toward each and every one of us. Alexis had no difficulty retaining her status as a British subject. Born in Pretoria, South Africa, Paul Nobbots held dual citizenship, including American via naturalization. The Raja would forever remain a Bengali native, and Casey Chew a citizen of the Chinese Peoples Republic, and I of course, orphan or not, an American. Steve further endeared himself to our stone-faced keepers by declaring himself a "Citizen of the Galaxy" and then refusing to amend the declaration. Flippancy aside, Steve may be a spacecraft pilot extraordinaire, yet he'll win damn few popularity contests.

Eventually, and perhaps a touch mysteriously as well, the situation began to unravel. Then things got briefly worse, abruptly did a quick turnabout and achieved resolution when the U.N. High Court reluctantly agreed to hear the case, whatever such "case" turned out to be. In the Western Hemisphere, that meant appearing before a tribunal of nine wise men and women sitting in judgment in either a Greater New York high-rise, or a Greater Los Angeles lower high-rise. A spur of the moment decision was apparently made. Interdicted from the curious and incurious alike by a squad of green-uniformed U.N. Special Police, we were escorted through Earth-Luna Station's corridors and lifts, and ushered aboard a shuttle to be taken we knew not where.

Our destination turned out to be Greater Los Angeles — "My L.A. hometown — where I'd been reared in an orphanage. Turning back into ground-pounders made all of us feel like we weighed between three and five times "normal," personally a traumatizing experience after the years I'd spent living and working in space, and especially hard on Casey, still recuperating from

his injuries. On top of that was the shock provided by the L.A. megalopolis itself. The occasional fog may now and then creep in on little cat feet, but endemic smog stomps in almost daily wearing combat boots. In no time I contracted a miserable head cold — we all did. Of necessity, planet-dwellers grow thick hides and acquire an obscure form of semi-immunity to everyday environmental hazards, yet such hard-shell defenses deteriorate over time when one migrates into space, where the dangers are elemental, not subtle and semi-invisible. A ruptured pressure-suit means explosive decompression, and a violent, agonizing death. In space, you either learn to take refined precautions suiting-up before entering vacuum, or risk making it a one-way trip. Air conditioning filtration helped once we were incarcerated in an anonymous L.A. high-rise, but it was far from sufficient. The only method of cheating a poisoned atmosphere is to stop breathing.

We were eventually confined — held prisoner, “domiciled as guests,” or what have you, depending on the whims of our keepers — on the sixty-third floor of the United Nations Tower. We were interrogated at regular and irregular intervals by teams of faceless “experts,” most of whom nearly as cordial as the average brick wall. We were interrogated exhaustively, ad nauseum, during what was advertised as springtime in the balmy southern California littoral, where the vernal season is distinguishable from summer, fall or winter only because it occurs at a different time of the year.

One gray-brown day in May, the Greater Los Angeles basin was rocked by what to us was an exceptionally strong earthquake, but no more than a run-of-the-mill temblor on the updated Richter/Berghof Scale to which local denizens paid about as much attention as they did to a Santa Ana windstorm. The quake left most of our crew paralyzed with terror, but I had lived through prior experiences. Our perch in the high-rise amplified the oscillation, causing the sixty-third floor to roll back and forth like a ship in heavy seas, a motion effecting identical results.

The fairest of the fair in every sense of the term, Alexis, turned a bilious hue and was sick. After recovering a trifle, she said weakly, “Now I . . . realize why you were orphaned, Roger. All your forebears were . . . earthquake victims.”

“Don’t exaggerate,” I advised. “You’re *mal de mer* victim, not quake survivor. No one has ever died of seasickness.”

“They only . . . wish they would,” she said, and groaned.

Even the pilot, who’s as far removed from physical cowardice as any human being can ever be, was whey-faced after being shaken up by the roller. “Given my d’ruthers,” he told me weakly, “I’d rather dodge Stinky’s slingshot boulders in Ceres than live in L.A.”

Time wore on at a pace a tad slower than cryogenic molasses. Alexis kept pulsing the various minor league U.N. bigwigs, hangers-on, consultants and assistants with whom we occasionally rubbed shoulders, demanding to know when we would be allowed to enlist legal aid on our behalf. She received a steady, off-and-on series of evasive answers invariably delivered with what was intended as a polished, reassuring, ingratiating self-serving bureaucratic smile.

Alexis persisted — something she’s extremely good at — and we were eventually notified that our “case” would be heard within the coming eek. The “hearing” turned out to be an audience which in no way resembling a formal hearing, and merely a brief, unsatisfactory, weird affair. We were whisked downstairs — ten of us, Demeter’s ringleaders in someone’s skewed estimation — and left to cool our heels in an antechamber for more than an hour. Summoned at

last into the courtroom, we stood before the lone occupant, a florid-faced, balding gentleman in his late sixties or early seventies.

The magistrate, justice, whatever his title, hitched up his trousers, parked his ample butt on the edge of a long conference table and surveyed us with unveiled belligerence. “Good afternoon,” he greeted, sounding a bit snide. “Names are unimportant here, and this . . . meeting is to be considered off-the-record. You would be wise to think of it as something that never actually took place. Should any of you mention our gathering, it will be categorically denied. Do I make myself perfectly clear?”

“It’s the U.N. Chief Justice himself,” whispered Alexis.

“Bully!” I whispered back. “Maybe we’ll finally see some action.”

Twenty - Pick Up the Pieces, and Weep

Our hushed whisperings attracted His Honor’s attention. He cleared his throat irritably, sniffed his displeasure in our general direction and said louder than seemed necessary, “Let me begin by saying that individually and collectively you people, and the exotic program you purportedly were engaged in constitute the sharpest, most formidable nettle it has been my privilege to attempt adjudicating. Be that as it may, the adage about grasping a nettle firmly lest it do more serious damage most certainly does apply.”

The Chief Justice har-rr-umphed! and continued. “A decision has been rendered, not lightly I assure you, with regard to your disposal . . . That is to say, your, uh, future prospects. Each of you is to be released on his or her own recognizance only if you are amenable to signing an agreement, the conditions of which I will shortly relate. Transportation will be arranged to any point on the globe, or if you so desire to your former residences in space. Releasing you sans charges, however, will be contingent upon two stipulations, and the somewhat harsh condition I mentioned. Firstly, you must willingly sign a transcript of the statements given both freely and under oath during various interrogations, and testify to the accuracy of each individual deposition or recorded statement, and furthermore attest to the fact that said depositions and statements were made of your own free will, and lack any vestiges of coercion or duress on the part of the United Nations Organization, or pressure from any other individual or agency.

“Secondly, you must also sign a pledge swearing in effect to the fact that neither individually nor collectively will you ever again undertake to participate in a similar deceptive program or project. Intelligent aliens from the stars indeed! Your tale smacks of paranoid rantings and ravings, the sort of things one might hear from members of the lunatic fringe, which I am beginning to believe has become more of a solid border, especially since many of you present here were once patients in . . .” The chief justice broke off and cleared his throat.

No retorts or comments were forthcoming from us, but I Alexis’ fingers tightened on my hand. Burning with indignation, seething inside, she said, “How did you imagine our base was destroyed, sir? Several of us were seriously injured, nearly killed. Is it the U.N.’s belief that we decided to perpetrate our program’s demise *ourselves*?”

“Dr. Lemmon,” intoned the justice, “we have only your collective assurance, in addition to an assortment of suspect news stories, a few of which tend to substantiate the hearsay

evidence that such a base ever did exist, let alone was destroyed by . . . I can hardly bring myself to say *telepathic aliens from the stars*.”

“We have committed no crime,” insisted Alexis.

The chief justice leered at Alexis, measured his words as if they were being rationed, and said, “I am fully aware of your identity, young woman. Please allow me to remind you that your esteemed father and I were acquainted in the long ago and far away, when we too were younger and the world was a considerably more sane and happy place. I’m quite certain a Nobelist like Alexander Lemmon, may he rest in peace, would be grossly disappointed in the, ahem! doubtful ‘accomplishments’ of his one and only offspring.”

Alexis stiffened beside me.

I whispered anxiously, “Let it go!”

“But back our reason for coming together on this most unhappy occasion,” pursued his honor stridently. “We are gathered not to bandy words concerning your actions, intentions, or ‘crimes,’ should there have been such. You might also think twice before daring to say that no crime has been committed, per se. It may be true that no formal statutes were violated, yet whether false or true mightn’t one consider incitement to global conflict an act far above and beyond the commission of the most heinous crimes? There are crimes, you see, and then there are *crimes*.”

“We’ve been held prisoner against our will for some time,” complained an engineer.

“You have indeed, sir. Largely, may I add, for your own protection.” The portly chief justice slipped off the conference table. Short in stature, puffy-faced with latent anger, he crossed his arms belligerently and began parading to and fro before us, his manner that of an irate, overfed bantam rooster. “Be aware, each and every one of you,” he declared, “that the seething mass of hungry, plague-ridden, disenfranchised human beings inhabiting our loosely labeled Third and Fourth Worlds love to coin derogatory rallying cries and catch phrases which describe you, uh, ‘crime,’ the most commonly used term in multiple languages translates as ‘wastrel.’ You gentlemen, and lady, to use terms not necessarily appropriate, have been universally condemned throughout the so-called Third and Fourth Worlds as prime wastrels of the first water. It’s conceivable that each of you might well be hunted down, and slain — assassins exist who specialize in ridding the aforementioned downtrodden billions of all ‘Enemies of the Revolution,’ to borrow a designation popular in certain quarters. You might have encountered such an assassin by now had we not seen fit to sequester you until the furor died down a trifle.

“Should wisdom prevail,” he continued, “each and every one of you would do yourselves a tremendous favor by accepting the proffered U.N. Aid, which includes aiding you in adopting a substitute persona. Anyone who applies for an alias plus relocation, plus cosmetic surgery if an altered appearance is deemed necessary, will receive those boons gratis. In fact, were I in your shoes so to speak, I would think very seriously about leaving the planet altogether.”

“Damn fine notion!” endorsed Steve much too loudly.

I winced. Sitting directly behind Alexis and me, Steve had obviously grown weary of the “proceedings,” if that was what they could be called.

The elderly chief justice’s voice cracked like shattering glass. “What was that, young man?”

Still hot over the inequity of it all, Alexis intervened. "It all seems so terribly unjust, sir," she said, preempting the outburst from Steve she believed might be inevitable.

"Don't make an issue of it." I whispered. "This charade doesn't count. Face it, we're a few giant steps past being ordinary pariahs. Sig Tollefson did too good a job."

She grimaced. "I suppose so." She rose, took a firm grip on her temper and did her best to moderate her tone of voice. "Your honor, we would like to —"

"You are *not* to address me in that manner!"

"I . . . beg your . . . You have my sincere apology, sir." Alexis licked her lips, reined her indignation with a supreme effort. "On behalf of us all, I would like to thank the United Nations, and you personally, for the leniency and regard for our safety you've shown us. We are most grateful."

"Humm-m-mph!" The high justice rocked on his heels and let his jaundiced gaze rove from person to person until it settled again on Alexis. "You should also be made aware that had my counsel in this matter been upheld by a majority of those in authority you would all be candidates for immediate certification. Good day!"

With that, the U.N. Chief Justice turned and ankled his way out of the courtroom.

* * *

On our final evening in "my L.A." the post mortem confab we held was given over to solemn headshakes, regretful utterances like "Too damn bad!" or "Rotten shame!" and similar concessions of defeat. A consensus agreement was reached to the effect that anyone wishing to communicate with anyone else could do so through Mattingly in E-L, though what there was to say after all had been said and done eluded me. Dead as last week's news, and soon to be forgotten, Demeter was now another smallish crater on the pitted face of a sterile minor planet circling the Sun endlessly, endlessly . . .

The U.N. Intelligence Service performed cloak-and-daggerish wonders spiriting us away from the Greater Los Angeles megalopolis unseen. Sometime during the wee hours Alexis, Steve and I were whisked to the Pacific Launch Complex offshore Lahaina, Hawaii, where we boarded a shuttle incognito minutes before an attendant opened the gate for a handful of other passengers.

Nobbots elected to visit relatives in Pretoria. The Raja flew directly to New Delhi to spend a relaxing stay in his parents' home. Casey Chew, awkwardly using crutches, went north to San Francisco to recuperate with his wife, her relatives and his infant son. Travel arrangements for we "celebrity" ringleaders were undertaken by the U.N. Office of Special Services, while less well known Demeter's staff members were simply released to do as they pleased.

Our homecoming was peaceful and unremarkable, except in one respect. Arriving back in Earth-Luna was literally a breath of fresh air after the interminable weeks spent in what once had been "my L.A." Alexis, Steve and I managed to remain anonymous. We were relieved not to be bothered by reporters or curious stares aboard the shuttle, and after the shuttle docked in E-L's zenith berthing stack we three merged seamlessly with a gaggle of tourists who squealed and gasped their way through the umbilical tube, elated yet apprehensive over their first prolonged grapple with microgravity. Steve split for parts unknown with only a casual farewell wave.

Notified of our scheduled arrival, the Mattinglys were waiting for us in the transient passenger lounge close by the bank of spin elevators. They greeted us warmly and we exchanged

a few clichés riding the lift in spoke three “up” to their suite. Alexis and I kept our heads lowered, hoping not to be recognized. Far as I could see, no one looked at us twice.

Sir John drew me aside after dinner for a snifter of brandy in the parlor. “What plans have you made for yourself, Shore?”

Thoroughly deflated in spirit, I shrugged. “Jeff and I talked about returning to the observatory if you’ll have us.”

“Certainly, certainly; absolutely no problem there,” he said without hesitation. “You’ve both been sorely missed, I assure you.”

I downed a swallow of brandy. “But first — for at least a few weeks — Alexis wants me to stay with her in Xanadu. She’s taken this whole thing awfully hard. The true significance of what we’ve been through didn’t really hit home until we boarded the flight up from L.A. She’d been so preoccupied with our arrest and other problems associated with the disaster in Ceres hadn’t registered fully until . . . Well, you know Alexis, Sir John. I’m afraid she’s fallen into an apathetic funk. Believes she’s facing a vacuum, with nothing left in her life to think about, nothing left to accomplish.”

Sir John’s nod was wholly sympathetic. “If possible, do your best to try keeping her mind off the recent misery, Shore. Having you beside her could well be her salvation. Before heading for Xanadu, however, you might consider bringing her round to visit the observatory. If nothing else, it may perhaps bolster her morale a tad, don’t you think?”

“Um, not a bad idea. I’ll suggest it, see how she feels about it.”

“Splendid!” He upended his brandy snifter. “Shall we join the ladies?”

The following morning I gave it my best shot. “Alexis, how’d you like to join us in the morning commute to Galileo? Sir John invited us to poke around the observatory for a few hours, see what the staff’s up to. It’s Friday; we can come back on the early bus.”

The ploy worked, though not to my entire satisfaction. Alexis acquiesced in a dispirited, half-hearted way, accompanying me and a busload of colleagues and co-workers heading out to the observatory. However, while our visit proved to be Old Home Week for me, it quickly became a crashing bore for her. Cronies buttonholed us by ones and twos and small groups and indulged in hearty reminiscences, studiously avoiding any mention of our involvement in what the media had by then termed “The Great Demeter Hoax,” even if one and all of them considered themselves insiders who were aware of the details. When I invited Alexis to don a borrowed pressure-suit and tour the hundred-meter instrument module, she declined less than graciously.

“No more therapy if you please, Roger. I want to go home.”

By home she meant Xanadu, not E-L. We overnighted one last time in the Mattingly’s suite, bade them fond farewell and hopped aboard the nine o’clock shuttle.

Xanadu looked and felt like the same tubular island in the sky I remembered. Barring inadvertent destruction by warfare, or a wandering comet or asteroid, Xanadu will remain as it is, where it is a few billion more years until old Sol eats up most remaining fusible material, begins approaching stellar senility and swells into a nebulous red monstrosity that will eventually engulf and devour Xanadu as well as the Earth itself. Yet for some reason the enchanted, half-timbered Tudor cottage no longer quite fit the template of a blissful haven from strife, struggle and care. Oh, it will always be quaint and cozy, filled with Alexis’ ricky-tick furnishings that advertise her love and artistry and presence. The grand piano still crouched neglected, while the spinning

wheel stood unmanned, or whatever the hell spinning wheels do when not in service. Three servants reappeared — from whence I’ve no idea — and hastened to satisfy our every need. I couldn’t put my finger on exactly what had changed, nor could I deny a general feeling that the disaster in Ceres had thrown a dark cloud over Xanadu, allowing its magic to slip away.

In a short while, after a tot of reflection, I changed my mind. The Tudor cottage was actually all it had ever been or would be. It was Alexis and I who had soured. We had our first tiff, sort of, partly because I was concerned about her and refused to back off and leave well enough alone to let her grieve internally until the despondency wore off, or wore itself out.

I remember saying something like, “Like to go for a stroll?”

“Not really. You go.”

“Uh-uh, not by my lonesome. What’s bothering you, Alexis?”

“Nothing.”

“Come on, don’t be that way. It’ll be easier for both of us if you —”

“Oh, stop being a chatterbox!” she said peevishly. “I’ve neither any wish to be coddled, or kept occupied with trifles. I just want to sit by myself, and think.

“Umm-m-m, not a bad notion. Its something you’re very good at. Let me see if I can guess what it is you want to think about. Is it money? Has to be, probably. Listen, I have a small stash tucked away. It isn’t doing much of anything at the moment, so I’d like to —”

“Oh, you silly ass! Demeter left me destitute in a different sense, not the way you have in mind. Father left five separate trusts, two of which remain untouched. The revenue from several renewed patents also continue to roll in, and . . . Oh, forget it! I’m dreadfully sorry to be so cross. Can you ever forgive me?”

“My fault. I’m a lifelong sufferer from foot-in-mouth disease.”

She smiled to be polite, but it was a pale shadow of the former sunburst that could light up a whole room. “I haven’t totally given up, you know,” she said, sounding wistful.

“You mean . . . Demeter?”

“Of course. What else?”

“You may not be thinking clearly, Alexis. What you’re doing is beating a dead horse.”

“But is our horse really and truly dead,” she asked in a flash of defiance, “or possibly still barely breathing? I want you to think, too, Roger. Tell me, haven’t we developed and engineered the *applied* technology which will make starflight a reality?”

“That we have, twice over, in spades. Someday another team will stand on the shoulders of what you and Casey have accomplished. I’m absolutely certain of it.”

“No, I’m going!” she cried, irked rather than soothed by my words of comfort. “*Me*, not someone else!”

“I admire your spirit if not your —”

“Roger, if you love me *please* stop mouthing inane gibberish. Twiddle your thumbs, go back to work at Galileo, sit down and write the treatise on cosmology you’re forever promising to write. John’s invited both you and Jeff to return, hasn’t he? Do *anything* you wish, except for pestering me with vacuous reassurances, second-guesses and invitations to be of good cheer.”

“Okay, okay.” Taken aback, I said weakly, “Yeah, Sir John did invite Jeff and me, uh . . .”

“Why not resume your career?”

“Listen, if you really believe its what I should —”

“It is! I *swear* it is, Roger.”

Though feeling neither casual nor shruggish, I managed to shrug off her harsh suggestion. “Fine, fine! Your call, Alexis. I’m feeling pretty despondent myself, so maybe that would be a best move for both of us. I’ll trot inside and start packing.”

Feeling numb in mind and limb and spirit, I took down from the walk-in closet the deluxe folding carryall I’d purchased to replace the battered suitcase no doubt vaporized along with its contents and everything else I owned in Ceres. Sort of turned-to-stone inside, I threw open the carryall on our bed, and was in the process of mangling a new gray jumpsuit by making a thumb-fingered pretense of folding it neatly when Alexis burst into the bedchamber.

“Roger, darling! Put those things away. I didn’t mean it. I’d feel lost without you. Stay!”

I held her, rocked her gently. “I’d never run off without saying bye-bye.” It was then that what I’d been waiting for, hoping for, finally happened — her tears came, a flood.

“I’m such an ignoramus,” she sobbed. “I’ve been so frustrated, so bloody frustrated. I took my frustration out on the nearest target, you. Can you ever forgive me?”

* * *

“You are hereby forgiven.” I kissed her, then kissed her again. “Wasn’t trying to put you down for chasing your dream, Alexis. But it has to be practical, reasonable dream you can think your way through calmly, logically. Way it is, if any of us were to so much as stick our noses into anything distantly related to starflight . . . Well, the consequences wouldn’t be exactly pretty.”

“I, yes . . . I imagine it would be as you say. We’d be arrested, or possibly lynched.”

“Whether or not you’re willing to admit it,” I told her, “there’s also the money angle. You may not be tapped out, but financing the revival of a major, *major* program like Demeter, especially now that your name is mud, capital M, capital U, capital D, in every financial house from New York to Luna to Jespersion, just think what capitalization a new start would entail: a second starship from scratch; jigs, fixtures, handling equipment; payrolls, hardware, software and firmware; supplies; logistic expenses, et cetera, et al — an all but endless shopping list — nor could we invent a cover story that would hold a milliliter of water, not after Tollefson’s propaganda campaign, or what took place afterward. Think back to the pledges we signed. Why, the U.N. would automatically construe the slightest move toward reactivating Demeter as only one more brazen hoax perpetrated by the same nest of loonies as before, and our friend the U.N. Chief Justice would go ballistic, which may be the major understatement of all time.

“Bottom line, bluntly stated,” I concluded, “is that individually and collectively we have offended the big bosses, the self-important men and women who once ran only the homeworld, but now run every habitable site in solar space. They not only play for king-sized stakes, but have bales and bushels of clout. What’s even scarier is that they’re inclined to sidestep the rules when something truly important crops up, especially anything that might pose the slightest threat to their own oligarchic stature and power.”

Alexis nodded, drying her eyes with a issue. “More than anyone, I do appreciate every aspect of the problem. Nevertheless, I’m determined to press on, to never give up.”

I couldn’t help but be touched by her single-minded passion. “and when you’re determined, you are *determined*, Alexis.”

“A failing of mine,” she mused, not believing a syllable of it herself. “Call it obstinacy, or call it stubbornness. Call it anything you wish. Somehow or other, in some undiscovered manner, I am determined to find some basis for carrying on, and will until I find some way.”

“Alexis, dear darling, I believe you.”

She kissed me, tugged free of my embrace and gently patted my cheek. “On second thought, I’m sure it will be best if you return to Galileo for a time. I’m not fit to live with at the moment, and it makes me sure we’ll only quarrel if you stay. Give me an opportunity to make peace with myself, dearest Roger. Then, when we do get back together, I promise to be someone you’ll want to be around, not a selfish shrew eaten by her own . . . yes, determination. While we’re apart, I intend to search for a way to carry on. I must! It’s just an urge, but a necessity.”

“Leaving you here in Xanadu will tear me up, but I’ll do whatever you think best, but only on one condition. I want to hear your faithful pledge that you will never let Demeter turn into an obsession. Don’t let the starflight dream get you down to the point where —”

“I shan’t,” she said firmly. “That’s a promise.” She sealed the promise with another kiss.

“All right, it may sound redundant, but you also have to promise not to forget your pledge. If I can help in any way at all, let me know at once. Things may eventually shake out, but resurrecting Demeter would be an awesomely tough row to hoe. All we have in the way of assets are . . . Sorry, afraid I can’t think of a single one.”

“Determination,” she said, not wishing to wear out the term, but saying it in the quiet, self-assured way that made her sound much more like herself. “Determination is our only major asset, if not our sole remaining asset. Who knows? In the end, determination may be sufficient to hold at bay every ugly, scheming, wantonly destructive creature in the universe.”

“Amen!” I’ve never been more proud of her than at that moment. “Alexis Lemmon, you are some gal! I’m not a praying man by nature, but I’m going to take lessons and say a little prayer for us, for Demeter.”

Her smile was a bit forlorn. “A prayer to Saint Jude would seem appropriate under the circumstances.”

“Saint who . . . ?”

“Saint Jude, the patron saint of lost causes.”

Twenty-one - Reunion

Except for the girdling Jura Mountain fortifications thrust upward eons ago, the section of Mare Imbrium leading into the Bay of Rainbows looked precisely identical to every other locale in the desolate lunar maria — changeless, monochromatic and forbiddingly empty of every living thing.

In mid-train, our monorail car streaked across the gently curving plain rushing past at a dizzying pace. From our high vantage atop the elevated structure sewn with magnetic levitation shells. The waxing glare of sunrise bathed the highest tips of the Juras in flame, blotting out the unwinking stars overhead, making it apparent that the slow-paced lunar fortnight was fading. Limned in the faint ruddy glow cast back by the peaks, shadowed bastions of rock marched northward from the jutting spur of Promontory Laplace, an ancient upthrust standing lonely

sentinel duty in the bay, a distance apart from the entrance tunnel leading to Mare Imbrium's sublunar city.

Summoning the Raja and me to his office in Galileo, the director had acted mysterious, and in fact conspiratorial — something definitely not in character for Sir John in his official capacity. Handing each of us a ticket on the evening shuttle from Earth-Luna down to the Kirsch Space Terminal in Mare Imbrium, he had sloughed off our questions about the whys and wherefores of our prospective travel to Luna with a vague statement about being invited to a rather important meeting, and then ignored our requests for an explanation.

The shuttle flight had not been a joyous experience. In freefall, a teenager in a nearby aisle seat had managed to spacesick all over the cabin, filling the crowded vehicle with a ripe odor neither the steward nor turned-up life support system blowers had been able to entirely clear. It had been a relief to ground at Kirsch where, predictably, the crowd dwindled and thinned out as passengers scattered to various monorail service ticketing machines. The space terminal in the open mare seventy or more kilometers east of Crater Kirsch, established primarily to serve industrial sites beneath the Alps, had been therefore situated closer to the perimeter of the ringwall surrounding the huge Archimedes Crater than the Bay of Rainbows.

Most fellow travelers aboard our train were homeward bound scientists, engineers and technicians, plus a handful of tourists. Sightseers often meet with disappointment when visiting any of Luna's utilitarian, sublunar enclaves, where work is the order of the day, not recreation. Diversions are hard to come by in Sinus Iridum. Nine of every ten attractions in the multilayered beehive carved beneath the Juras can be found more conveniently in a Seattle, Stockholm or St. Petersburg arcology complex.

Seated in the window seat facing Sir John as the train approached Sinus Iridum, I was contemplating the the monochromatic plain streaking past outside the car, and finding it difficult to entertain the notion of a medium-sized population center only a few kilometers ahead beneath the beetling, protective ramparts of the flame-tipped Juras. Struck by an idle thought, I winced inwardly, wondering how much luck Stinky the Spice Monster would have bombarding Sinus Iridum with a huge rock loosed its from cosmic slingshot.

"Revives unpleasant memories, does it, Shore?"

The director must have noted my downbeat expression as I pondered the fleeting mare. His comment ended my reverie. "Not at all," I said, shading the truth a bit. "I was taken into the medicenter too pumped full of medication to pay any attention to the scenery."

The Raja glanced up from the magazine in his digital reader. "Weren't we all?"

"Something troubling you?" inquired the director.

"I am a little concerned about Alexis. I can't understand why she hasn't bothered to keep in touch. Two months have passed since I abandoned her in Xanadu. I called again yesterday, spoke to one of her servants for the third or fourth time. Either no one there has any idea where she is, or were told not to say."

Mattingly's noncommittal grunt was an unsatisfying reply. He awarded me a penetrating look. "Off somewhere on holiday, I should think, in some restful, out-of-the-way place."

"Out of the way places," I replied, not holding back a hint of sarcasm, "don't come any more restful than Xanadu."

"Um, yes. Quite so."

Conversation lagged. I returned my attention to what passed for lunar “scenery,” the changeless floor of the Bay of Rainbows silently rushing past. Minutes later, the Juras seemed to rear up and cut off half the jet-black sky. Our necklace of monorail cars began a gradual descent from the magnetic levitation track elevated atop short pylons. Soon the train was running at ground level, and low berms appeared outside, rising higher as we gently descended a gentle decline, and abruptly dove into the blacked-out darkness of a tunnel.

“Hullo! Believe we’re coming in.” The director stretched in his seat.

The train slowed to a crawl, then gradually eased to a smooth halt. We had to wait for the hermetic doors behind the train to close and seal us off from vacuum. As pressure rose in the tunnel, the train slowly forged ahead into the station.

“Sir John,” said the Raja as we collected our bags and stepped out into the tiled, muraled terminal gallery, “you mentioned an important meeting. I hope you realize Roger and I came away with only a change of linen and a toothbrush.”

“Absolutely all you’ll need,” said Mattingly, his manner offhand.

“Oh?” Das caught my eye, and winked. “I’ve yet to see a conclave of astronomers who can work together without benefit of stacks and stacks of slides and documents.”

“No infernal Twenty Question rigamarole, if you please, Jefferson. Come along.”

The Raja and I crossed glances. Jeff shrugged.

Stiff and butt-weary from riding in spin elevators, spacecraft, a monorail train and what have you, I raised my knees with each stride, high-stepping through the concourse to loosen up. A good portion of my life to date was spent riding about in conveyances of one kind or other. If I could reclaim the man-years wasted in being transported hither and yon, I’d be approaching adolescence, not heading toward middle age.

“This way,” urged Mattingly, stepping on a moving slideway.

We rode downward four levels, and boarded yet a different conveyance — an automated, bubble-topped electric runabout. Letting the sensor scan his debit card, Sir John punched keys, and we settled back, allowing ourselves to be whisked deeper into Sinus Iridum.

The small four-seater sniffed its electronic way along integral induction power and guidance strips within the paving. We traversed Level V’s interleaving traffic ways, pausing now and again at infrequent intersections to wait for a brief surge of cross-traffic.

The more I saw of the city, the better it looked. On either side of the exceptionally clean thoroughfare, pedestrians wore next to nothing, and wore it with poise and dignity, which made the the feminine variety particularly noteworthy to someone who had not seen his beloved for months. Once, our runabout stopped for cross traffic, and a brunette dazzler in a skimpy halter and clinging tights hailed a cruising, unoccupied bubble car over to the curb. I must have given her the eye because she eyed me right back. By the time we left the vehicle after stopping at a green-landscaped esplanade, I was in a romantic frame of mind — horny, to be brutally truthful.

The director led us downward on foot to Level VII, where we boarded an older slideway that creaked and groaned and complained as it carried us off into what might have been labeled left field, where everything looked a bit more age-worn.

“Is this,” the Raja inquired drily, “to be a meeting of gnomes and trolls, habitués of gloom and darkness?”

Mattingly's guffaw told us his mood had improved. "Don't make a fuss, Jefferson. Not what one might call an exclusive neighborhood, I grant you. Step lively; we're almost there."

Abandoning the creaky slideway, we hiked down a somewhat shabby corridor. Sir John halted before a set of double doors set flush in a featureless masonry wall. I searched for a nameplate as he rang; there was none.

Alexis Lemmon opened the leftmost door.

"Roger!" Under mild lunar gravity, she came into my arms in a single bound.

I dropped my luggage, kissed her soundly. When I finally let her come up for air, she said, "Oh, my!" and turned to the others. "Straight through the entry hall, John; you know the way. Hullo, Jeff. How delightful to see you again. Pardon us a moment. Roger and I have some catching up to do. We'll join you in two shakes."

She let me look at her for a long moment, then I kissed her again. Leading me off to another wing of the dwelling, she said hesitantly, "How've you been?"

"I . . . okay, fine. Why did you make a big secret of —?"

"Shush! All your questions will be answered shortly. The past is past; we dare not let it to trouble us now."

By the time we reached her bedchamber, I was thinking only of the present. I kissed her, kissed her again, reached behind me and clicked the latch on the door.

"Oh, dear! Abandoning our guests would be terribly unhostess-like . . ."

I kissed her again, cutting off further objections.

"What will the others think?" she asked. I lifted her, carried her to the bed.

"That I am the luckiest fellow in history," I said. "And come to think of it, I am."

To cite a new twist on an old adage, abstinence *does* make the heart grow fonder.

* * *

It was like a family reunion staffed by a grossly extended family, except squared or maybe raised to the third or fourth power.

"Hiya, Rog." Henry Ogilvie pumped my hand, his welcoming grin enthusiastic-plus. Steve was there, cocky grin in evidence; beside him, Paul Nobbots resembled a larger-than-life ebony statue endowed by the sculptor with a knowing smile. Good old Casey Chew, holding his button-eyed babe on his lap, introduced the Raja and me to Laura Chew, who dipped her head politely in our direction, then leaned toward her husband and said something in Chinese.

"Pair of you surprise Laura much." Smiling like a cheerful, chubby cherub, Casey said Laura had whispered that two astronomers like us should be older, with long white beards."

Laura Chew giggled infectiously.

"Please explain to Laura," I told him, "we astronomers will be too soon old, and too late smart, but we do plan to grow long white beards. You look great, Casey. How's the leg?"

"Hurt in San Francisco fog, or when weather change. Otherwise good."

Sparing no expense, Alexis had ordered a catered banquet. All hands dug into a buffet of crab louie shipped up from Earth at more-money-per-kilogram than my monthly earnings, not one but two meat courses, ham and lamb, and a crisp salad doused with the herbalesque dressing she concocts herself, five varieties of wine, and a wiggly fire-and-ice dessert she announced as the pride of a Sinus Iridum specialty bakery.

An exceptionally fine time was had by all, especially Nobbots, who was more talkative than I remembered, in fact *far* more, which it struck me as unusual, since only months before our group had parted under a thick, dark cloud. All through dinner I noticed the Raja's puzzled glance shifting from one former associate to another. Das was having the same tough time I did trying to reconcile the conviviality with our dreckish status.

After dinner, Laura Chew took her infant son off to beddy-byes. Alexis invited the rest of us to troop downstairs and inspect her father's lab — the facility in which she and Casey had developed, engineered and fabricated the n-space prototype and flight test birds.

Casey gave us the guided tour. The pristine, long-mothballed Lemmon Sigma Pinch Tokamak resembled a collection of miscellaneous spare parts polygamously mated to the miscegenated offspring of a steam boiler and a do-it-yourself hydroelectric generator. Casey's uncharacteristic manner surprised me, too; he was twice as outgoing and loquacious as I had imagined he could ever be. More puzzled than ever after touring Alexander Lemmon's fabled laboratory, I trailed the others into an jackhammer scarred, rock-walled chamber near the stairway, where the puzzle deepened. I wondered why Steve busy setting up the same security screen unit used in Xanadu during our original briefing all those weary months ago.

"Why the anti-snooping gear?" The Raja posed his question with typical directness. "Has the revolution started?"

"Yes, in a manner of speaking." Smugness personified, Alexis went on to say, "Casey has a major announcement for us." She took my arm, squeezed possessively.

A self-satisfied gleam in his blue eyes, Sir John said, "Told you the blasted meeting was important."

The pilot bobbed his head, letting Alexis know the room was secure. She disengaged herself, releasing my arm, and smiled benevolently. "Gentlemen, with the exception of Roger and Jeff, you're aware of our reason for gathering. I hope both late arrivals will forgive me for keeping the topic under wraps, but the reason is of such immense importance we dared not compromise security. On the other hand, even those of you who knew Demeter was alive and well in Sinus Iridum, have no inkling of the momentous news —"

"Whoa!" piped Das. "Not putting us on, are you?"

Her smile now radiant, Alexis said, "Exercise a little patience, if you will, Jeff. As I said, for the most excellent reason you and Roger were given absolutely no foreknowledge of the details about to be explained. She turned to Chew. "You have the floor, Casey."

Sounding reluctant, the physicist began haltingly. "Come about . . . when I go back to beginning, recalculate . . ." His features impassive, he said, "You tell, Alexis."

"Oh, no!" she said, attempting to be firm. "This is *your* show. Front and center, Casey!"

"You tell," insisted Chew, his mouth tightening into the testimonial to stubbornness I'd witnessed with on more than one occasion.

Sir John chuckled. "Come, come. No cause for stage fright, Casey. After all, you are among friends."

In typical iconoclastic fashion, Dr. Kenneth Clarke "Casey" Chew refused to budge.

Twenty-two - Saint Jude in Absentia

My beloved gave in, though not altogether gracefully. “I have no wish to hog the limelight, and perhaps cast a pall on Casey’s triumph, yet if I must, well . . . You’re aware that the propagated hadron alignment field powered by our lost starship’s mini-tokamak . . .” She paused, cut an irritable glance Chew way, and continued. “My strong suspicion has been borne out: our hero had something like this in mind when he and Roger risked their lives in foolhardy fashion to rescue the units. Also, I’m now certain Casey, being who and what he is, had in mind something more profound than salvaging the equipment simply because it was irreplaceable, beyond price. Naturally he will never admit subscribing to such an idealistic goal.

“At any rate,” she continued, “while recuperating from his injuries in San Francisco he devoted the months he to retracing the intermeshed chains of symbolic logic that evolved into the original design, the objective to determine if it might be possible to reduce or eliminate certain steps, while retaining critical elements. After encountering any number of stumbling blocks, he became frustrated, went back to the beginnings and totally reconstructed the equations in a hope of further ‘simplifying’ — his term, not mine — or ‘idealizing’ the synergistic functions of his FTL system. With a flash of insight during these labors, his aim changed to the radical attempt to rationalize an existing spacecraft for starflight. While plotting power curves against hadron alignment field characteristics, diverse parameters and associated, esoteric functions, he made a truly electrifying breakthrough, and decided that if sufficient power were made available to drive hadron alignment, almost any vehicle can be refitted to achieve n-space FTL propulsion.”

“Say again,” I requested.

Alexis’ beatific smile washed over me. “It’s true, Roger. I’ve gone over the calculations several times. Given a major power source, practically any vessel now in service can become encompassed in a generated hadron alignment field every bit as effective as that enabling our starship to transition into n-space during the shakedown flight.”

The Raja whooped loudly, clapped his hands.

Suppressing my urge to cheer, I said, “When do we leave? We can lease some old scow, do the refit here in Luna.”

Alexis’ effervescent manner subsided. “A portion of my revelation apparently slipped past you, Roger. Namely, ‘if sufficient power is available.’ Some old scow simply will not do. The power requirement isn’t merely awesome, but directly correlated to a ship’s gross metric tonnage. The larger the spacecraft, the larger the alignment field required to encompass that tonnage and freedom to transposition into n-space, plus of course the continuous, exorbitant power requirement needed to sustain it during n-space transit.

“John, Paul, Steve and I,” she added, “have privately screened and discussed several wide-ranging possibilities. The most promising candidates unearthed to date are a pair of freight vessels, one grounded in the Mare Tranquillitatis scrap yard, the other in a Phobos salvage yard circum-Mars. Unfortunately, one vessel is frightfully decrepit, and the cost of reburishing either would be exorbitant, not to mention the major expense of opening either hull to install and wring Tranquillitatis out dual Class B Tokamaks. A second major negative looms if we seriously consider the vessel parked in Phobos. Working on the tiny Martian moonlet would present logistic problems half again as formidable as those we experienced in Ceres.”

I spoke up. “Hold it a sec. Let me get this straight, Alexis. Are you saying the same, matrix module and black boxes used on our shakedown flight could be reinstalled in their present configuration aboard a larger vessel?”

“Precisely.” Alexis exhibited renewed exhilaration. “Repair and rework will be necessary, of course. But as I understand Casey’s breakthrough, even that will be limited.”

“Wait, I still don’t get it. Wouldn’t the extreme additional power factor blow the existing electronic equipment into a fused mess?”

“No, no.” Casey lifted a pudgy hand, regarding me in the manner of a professor correcting the misconception of a backward student’s. “Power factor is . . . Explain, Alexis.”

“What Casey wants clarified is that the alignment field’s size is a product of the gigawatts required to drive it, not the hadron alignment sequences themselves, which are the same, were and will be the same for every usage from our prototype to Alpha Drone, and later the starship. The hadron alignment field’s huge power factor is a necessity when it comes to encompassing a major vehicle, but a function totally divorced from the enabling microcircuitry. Is that clear?”

Sir John said, “Not quite, my dear. But let the power explanation go for the nonce. If I’m not mistaken, weren’t you about to suggest our principal problem is now funding?”

A subdued nod. “Quite. You did speak to an acquaintance about securing capital?”

“Er, yes. Met the gentleman last Thursday a week.” Sounding uncomfortable, Mattingly cleared his throat in staccato fashion. “It so happens I’m on good terms with a chap who moves in rather stratospheric financial circles. He is — that is, his family — has been associated with the Bank of England for generations. He passed through Earth-Luna, and stopped up briefly. A most engaging fellow for a banker; head’s screwed on tightly, know what I mean?”

“At any rate,” pursued Mattingly, “we chit-chatted after dinner, discussing this and that, nothing in particular, and reminiscing about what he jocularly referred to as ‘the bad old days.’ I casually mentioned a revolutionary development in spacecraft propulsion systems that stood to reap munificent dividends were one or more astute investors to show an interest. Naturally it drew his total attention.”

Sir John paused, prodded the cleft in his chin with a speculative forefinger. “I do hope you won’t think me rude for being brutally frank, Alexis, but when I got round to mentioning the program, and your name, he turned chilly — frigid to be more accurate. Said he’d heard privately how the U.N. High Judiciary is still contemplating a formal indictment for those responsible for the, er, ‘Demeter hoax.’ Said he’d been dreadfully put out to learn someone of your stature was involved, and so forth. Matter of fact, he all but advised me to have nothing further to do with you or the program. His manner turned decidedly cool. He made his excuses early and went on his way. Expect Margaret and I have seen the last of him.”

“Oh, John! I’m terribly sorry.”

“Tut! Excellent gentleman through and through, but the negative press and media coverage inspired by your sympathetic newsman effected as thorough a brainwash on him as every other financier in the known universe. A decent sort, it’s impossible to blame him for reacting as he did. Point is, he was someone I knew well both socially and professionally, whose integrity and intelligence are outstanding. I’ve tried to imagine what it might be like to approach the strangers in another financial house, and gave up the game. It’s no exaggeration to say Demeter’s name is mud, along with every one of us remotely connected with it. In light of what’s

taken place, even the term pariah sounds a bit tame. I myself escaped the major onus only because of an inability to accompany you to Ceres. Truthfully, I'd much rather it had worked out the other way round."

Ever the pragmatist, the Raja wanted to know how much money was involved.

"Oh, dear! The most modest estimate," said Alexis, "calls for something on the order of a billion and a third to outfit the hull in Phobos, and as much as even-eights as much for the all but derelict vessel here in Luna. When all is considered, however, despite the slightly less costly rework and outfitting of the freighter grounded in Tranquillitatis, it is also less desirable."

The pilot rolled his eyes. "Hate to tell you, but you can forget about either packet."

Alexis pursed her lips. "No, we shan't forget them," she said tartly. "Considerable tonnage is necessary to accommodate dual fusion tokamaks, and those ships are the only sizable hulls available. Paul and I checked the U.N. Spacecraft Registry a second time."

The pilot shrugged. "Two classes of U.N. military ships sport dual toks," he said more in the spirit of stirring discussion than maybe considering the ships in question a valid solution.

"Splendid!" exclaimed the Raja with theatrical intonation. "All we need do is ask the U.N. brass to pretty-please loan us one of the commissioned warships."

Henry Ogilvie piped up. "Miss Lemmon," he said plaintively, "I know of a —"

"Please, Henry, not now." Vexed by Steve's offhand remark about U.N. spacecraft, Alexis made no attempt to conceal her displeasure.

"But, Miss Lemmon," insisted Henry, "I know of two ships, either of which would —"

"Henry, really! I'm forced to insist that absolutely *no* vessels listed in the registry are powered by dual tokamaks. We made a very thorough check, then rechecked the entire register."

"Right as rain you are, Miss Lemmon. But GER's privately owned, and their hulls aren't registered. Both big twin packets, *Asgard* and *Valhalla*, have no need of investors with fat wallets to keep 'em out of the red, or any stockholders either. Aside from passengers eager to pay through the nose for passage, those long-haul ships carry gross tonnages of government goods, VIPs and special consignment stuff GER charges a bundle 'n a half to ship. What I know for certain after shipping out twice aboard *Asgard* not long after she was commissioned, I know for sure that packet's powered by dual Class A Lemmon Tokamaks because I —"

"Hey!" I piped up, "Henry's right. I once dated a GER stewardette who's made round trips in one or the other of those GER torch ships. Under government contract, they now and then even resupply the research station way to hell and gone out on Titan."

* * *

Seconds passed in silence as my reinforcement of Henry's revelation sank in. Alexis slumped back, tears in her eyes. "What a waste of time! Here we are, beating our heads against a stone financial wall when the answer was right in front of us. All we have to do is lease one of those vessels for six months. Henry, I could kiss you!"

Doing his best not to blush, Henry said, "Sorry, Miss Lemmon. Won't be that simple."

Elated-plus, Alexis had stopped listening. "Paul, arrangements will have to be made by proxy. After our most recent adventure in Ceres, none of us dare to venture within a long stone's throw of any GER office. Can we find an agreeable third party? Offhand, can you think of an intermediary who'd be willing to front for us?"

“Finding someone shouldn’t be too difficult.” While Alexis was questioning him, Nobotts had been eyeing Ogilvie shrewdly. “Henry, you voiced an objection of some kind.”

Henry had an aversion for being in the spotlight. He swallowed hard, lowered his eyes. “Feel rotten throwing ice water on that scheme, but there’s no chance at all of leasing either of the big GER packets. Far as I can recall, both are booked solid for years. *Asgard* and *Valhalla* are the onliest two of a kind, see? Ganymede Corporation would pick up any ’n all slack for either vessel if it was to be had. Except there’s never been any downtime for either ship.”

Looking crestfallen, Alexis said, “Are you positive?”

“Yes, ma’am. Certain. Sorry I brought it up.”

A dash of sulphuric acid could hardly have wreaked a more pronounced effect on my beloved than the letdown after poor, well-meaning Henry turned about and stole the newborn hope. Sir John tried to cheer us up, voicing a platitude about maintaining a stiff upper lip, not throwing in the towel quite yet, et cetera. But it was plain that his heart wasn’t in it.

The defeated silence dragged on. At last I said, “Don’t suppose the, uh . . . former benefactors could be talked into coughing up one last donation.”

Nobbots sniffed, and regarded me narrowly. “I wouldn’t be welcomed in any of the sponsoring nations, let alone have a prayer of obtaining an audience.”

I reflected briefly. “Okay, here’s a hot flash that might be worth chasing. Remember how fast Sig Tollefson came over to our side, how cooperative he was?”

Paul nodded. “Three times as intelligent as most journalists, he proved himself a staunch ally until unintentionally becoming the *éminence grise* who helped create our current wave of unpopularity. Not his fault for responding to Alexis’ plea for a favor. What about him, Roger?”

“Guess I took a strong liking to Sig, and not only because he went along with Alexis on the media snow job. He stayed up front with us all the way down the line. He even persuaded *Argyrei*’s skipper to divvy up his ship’s rations.”

“Nor could I help admiring how selflessly *he* helped our cause.” Gradually coming out of shock, Alexis nodded, and asked, “What had you in mind, Roger?”

“I remembered something he said after our confrontation in the hangar. You brought him into the base and had no choice but to level with him, because Paul’s right; Sig’s no ordinary investigative reporter. I watched him make up his mind after piecing together what you told him about Demeter and our looney bin charade. Remember the way he questioned us about ‘the opposition’ before you got around to mentioning Stinky or Llogaar.”

“Your circling aimlessly,” accused Alexis, “and not landing.”

“Tollefson said something,” I explained, “to the effect that if Demeter was successful the Marsrats would cheer their fool heads off.”

“Yes, I distinctly recall that, but what does it have to do with our present situation?”

“Throw all the ingredients together, stir them, and what do you have?”

My question earned blank stares from everyone present.

“What you end up with is . . .” I paused to reconsider. “Okay, see if this makes any sense. We have a very smart, oxygen-breathing acquaintance who happens to be a professional journalist living and working in the Mars carbon-dioxide environment as bureau chief of a major news service. Moreover, he’s a pro who’s not only demonstrated sympathy and understanding

toward Demeter, but knows the real story because he *personally* witnessed what that overgrown slug did to wipe out the starship and our ops base. Furthermore, Sig has to be a true believer.”

Alexis’ doubt-laden squint raked me. “For Heaven’s sake quit beating the bush, Roger. Do get on with it.”

“Tote up Sig’s knowledge of and sympathy for Demeter, plus the fact that parked in the Phobos scrap yard circum-Mars is a potentially usable hull, and what do you have?”

Nobbots stirred, sat a bit straighter in his chair. “You’re suggesting that we enlist his aid in soliciting a financial investment from the government in Jespersion?”

“Exactly! As local bureau chief of a major news agency, Sig has to be acquainted with a number of influential Marsrats in the capital enclave. I’m saying we might plead with him, egg him into having the Marsrats make Demeter *their* pet project. If we could bail-out Casey’s n-space gear from the stowage bay in the impounded ship, haul it to Mars and rig a demonstration for the bigwigs, and back it up with test data and video material obtained during our shakedown flight, I’m betting the Marsrats would bite, and bite hard.”

Her brow puckered, Alexis ruminated. “Rog-er-r-r,” she said, drawing out my name in a thoughtful way, “your idea is worth serious consideration. Two major problems do present themselves, however. Firstly, Martian society, to be generous calling it that, is far from being wealthy. I’ve been there, remember? Life in any of the Martian enclaves has never been much more than to maintain a bare-bones existence. I have serious misgivings about pleading for funds from a government forced to burden its citizens with heavy taxation simply to stay alive.

“Also,” she continued in the same morose vein, “you mentioned having Sig ‘goose’ the Marsrats into making it their pet project. I doubt if you meant it literally, but that’s precisely what would happen, and it would no longer be *our* program. In fact, it would surprise me if we received more than a figurative pat on the back afterward. Perhaps as a last resort, we might . . .” She trailed off, sounding utterly discouraged.

I made a rapid survey of the long faces in the annex of Alexander Lemmon’s historic lab, and decided the consensus of opinion shared Alexis’ evaluation.

Steve yawned. “Boys ‘n girls, we’re getting nowhere fast tossing back and forth ‘what ifs’ and ‘how can we’s? Daydreams are what that amounts to at this point. What say we fold this session till tomorrow? Henry and I have a gin rummy battle slated. Right, old-timer?”

Henry’s sober nod confirmed the pilot’s statement.

Alexis rose behind the desk, and yawned as if to concede the lateness of the hour.

“Minute, please,” said Casey Chew, who I had been sure was dozing. “Henry, you work long time for spaceship company, hey?”

“Nearly twenty-five years,” replied Ogilvie.

Chew picked up a stylus and started doodling on a scratch pad. “Still know lots people at spaceship company?”

“A few old hangers-on, yeah. Been gone a while myself, but I used to drop by regular at Tranquillitatis to chat up one or two guys I used work with, and yak, cut up touches, y’know.”

“Two big ships,” said Casey, his eyes thin slits, “each have dual tokamaks?”

“*Asgard* and *Valhalla*? Aw, yessir. Takes plenty of oom-m-ph! for a torch ship that size to bang back ‘n forth ‘tween here and Jupiter’s moons, and now ‘n then on out to Titan.”

“What,” demanded Casey, “is parallel power output of tokamaks in each ship?”

“Uh, parallel . . . Can’t say offhand.” Henry scratched his head. “S’pose I could ride the monorail over to Tranquillitatis and find out.”

“Good. Go get data.” Casey leaned forward earnestly. “Know someone who can help get hands on engineering data for ships, hey?”

This time Henry’s nod was emphatic. “Oh, no sweat there. Comp’ny stores all tech data in a confidential database. There’s also a GER backup microfile in the Tranquillity machine shop, and a third ’n fourth in the tech libraries aboard both of those ships.

“Up to date?” demanded Casey.

“Kept up to snuff, yeah. Those files’re updated regular as clockwork. What’s more, the spatial architect computer drawings tell where the body’s buried on every fitting and rivet aboard *Asgard* as well as *Valhalla*, and at the Tranquillitatis maintenance base they also —”

“Good! That it!” Casey’s plural chins bobbed enthusiastically. “We go in big dual-tokamak ship once we sure sufficient power output available.”

“Casey,” objected Alexis, “didn’t we just decide it wasn’t feasible to attempt leasing either GER vessel?”

Dr. Kenneth Clarke “Casey” Chew dropped his bombshell. “No lease,” he told us, his Buddha like grin firmly in place. “We steal!”

Twenty-three - Criminal Conspiracy

A stunned silence punctuated Chew’s announcement there in the rock-walled annex to the lab where Nobel Laureate Alexander Lemmon had dreamed his dream, made it all come true, and sent him on the difficult to negotiate pathway to fame and fortune.

The Raja ruptured the gravid stillness broken only by heavy breathing. He threw back his head and bellowed hearty laughter, trailing off with a residual titter. The remnant of mirth slid from his mahogany features. “Casey, you can’t be serious!”

“Go for broke,” declared Chew solemnly.

Once again a strangling silence filled the sub-lunar chamber. We all did a remarkable amount of pondering in a remarkably short period.

Her delicate features flushed, Alexis sorted the radical proposal’s potentials and possibilities. “Does it verge on practicality in any way?” she inquired of group at large.

“Practicality!” Jeff’s dark eyes glistened moistly. “It’s a practical road to the U.N. open air lockup on Madagascar. Can you actually see us pirating a spacecraft valued in billions?”

Sounding thoughtful, the pilot said, “Put your mind to it, and you can swipe anything, large or small. Matter of fact, thieving something outsized and super-expensive lowers your chances of getting nabbed by falling below that of small-timers who snatch minor items.”

“B-but,” stuttered the Raja, “what Casey’s suggesting is *insane*.”

Steve chortled. “Right you are, Jeff. It’s just what might be expected from a herd of loony-tunes escapees from their rubber rooms here in Luna? With that guy Tollefson’s help, the whole damn universe knows what brand of nuts we all are.”

“We go!” declared Casey Chew in no uncertain terms.

All of us started talking at once, or almost all. An apprehensive sag in his dewlap, Henry Ogilvie had listened in open-mouthed amazement, eyes round, his lower lip quivering.

Paul Nobbots on the other hand had been sitting perfectly motionless, an ebon statue of Rodin's "The Thinker," staring with unfocused concentration at nothing. Looking up, his features composed, only his voice offering a hint of animation, he said, "It will cost a great deal, Alexis."

"Far less," she said, "than refitting and outfitting either grounded freighter."

"Um, yes. A high probability," conceded Nobotts.

"What the hell is *wrong* with you people?" the Raja wanted to know. "You're blithely pretending it might be possible to pirate either of the most sophisticated commercial spacecraft in existence. Please try and think a little more clearly. The U.N. still has some of us under surveillance. Make one false step, a single wrong move in their eyes, and we'd be grabbed and put away someplace where sunlight gets piped in every third Thursday. We've already had a short sampling of what it's like to be thrown into the lockup. Any of you *enjoy* it?"

While anything but rhetorical, Jeff's question did not earn a rebuttal. We were all too busy chewing over the ramifications of Casey's outrageous notion to argue.

Sir John cleared his throat, a characteristic preamble to any meaningful statement. "Jefferson," he said, sounding paternal, "evading the U.N. Special Police would seem to pose considerably less danger than several others that come to mind. Is your objection to Casey's proposal to . . . borrow one of GER's deep space vessels based solely on moral principles?"

"*Steal*," retorted the Raja. "Casey said 'steal,' not borrow."

"Oh, there I beg to differ," said Mattingly. "Whatever Casey had misstated, were we to successfully complete and document a round-trip transit to the Alpha Centauri System, we could enjoy the distinct pleasure of restoring the ship to its rightful owners, doing so I might add with the monumentally enhanced capability of trajectoring to the trans-Jovian satellites in hours instead of now-current three-plus months. How do you imagine GER would react to a fantastic upgrade of that magnitude?"

Das was speechless. Sir John's prospective scenario was obviously something he had not considered, nor to be truthful had I or anyone else among us.

"Jeff, your objection is difficult to understand." Lowering her tone of voice to the soft-sell, honeyed contralto I had learned to be wary of, she said, "Didn't we jointly agree not many months ago to risk letting the world go up in thermonuclear flame rather than abandon Demeter? At the time, if I recall correctly, you were the most vocal cheerleader, urging us to plough ahead. Why cavil now at the notion of seizing our foremost, frankly what may be our sole hope to finish the program to which we've devoted all our energies, tears, blood, and a portion of our sanity?"

Then it was Paul's turn again. "As a crime," he said, "hijacking is all but impossible to predict, or if and when predicted, forestalled. Surprise is the one and only advantage we'll have," he continued, "and in this singular instance it weighs heavily in our favor. If we were to strike out of the blue, catch GER prior to a scheduled departure, neither the company nor E-L Security would have any cause for suspicion beforehand. After all, to what destination could authentic hijackers hope to flee? U.N. military ships are able to intercept a normal spacecraft within hours, a day or so at most. Simply put, places to hide a very large vessel in solar space do not exist."

Unconvinced, yet wavering slightly, Das puffed his cheeks, and shrugged.

"Casey," I asked, "if we did manage to . . . borrow one of GER's big ships, would you have enough time to install and wring out your n-space gear before the U.N. chased us down?"

Chew's instant reply consisted of a vigorous positive nod. "Leave to me. First must bring matrix module and other black boxes here to lab for thorough checkout, rework."

"You told us the units would do the job as they are."

"True statement. But must check damage to circuit boards through accident in Ceres, and replace components salvaged from holographic units."

"Gotcha, Casey! So how," I asked Paul, "do we bail out the equipment? If I'm not mistaken, the ship's impounded under U.N. Seals."

"Steve and I can take care of that," Nobotts said confidently.

"Right on, Skipper," declared the pilot. "We know every bolt and rivet in that packet. Best bet will be to sneak aboard through vacuum and —"

"*Festina lente.*" Paul held up a cautioning hand.

Looking at him askance, Steve said, "You stepped in what?"

"We'll either make haste slowly," clarified Nobotts, "or not at all. Alexis, there will be a crying need for Steve and me to get up to Earth-Luna as anonymously as possible. Do you suppose we could charter a small to medium ship? Steve has an unlimited ticket."

She nodded. "A sensible notion, especially if the U.N. is still keeping tabs on everyone's whereabouts. Make arrangements for a two or three-month charter. I daresay it may be necessary to trot back and forth between the lab and E-L more than once."

"Agreed. Various things can be done much more easily and quietly here in Luna."

"Be a tough nut to crack springing loose those black boxes 'n getting 'em past customs," warned Henry. "Declaring 'em would red-flag the U.N. snoops keeping one eye peeled for us."

"Good point, Henry." Paul thought it over. "Where else could the electronic hardware be taken for checkout and repair? Suggestions anyone . . . ?"

I snapped my fingers. "How about Galileo, Sir John? Casey could check-out and do the necessary rework and revisions in our elux lab."

"Capital, Shore!" Mattingly turned to Chew. "Galileo has a small yet adequate facility. Would that suffice, do you think?"

Revolving the issue in his own stolid, well-thought-out manner, Chew finally nodded affirmatively. "Can do! Must first buy plenty spares here in Luna."

"We shall, Casey. I'll take care of it." Alexis was glowing. She hugged herself and said, "Then it's decided?"

Despite one or two long faces, there was no verbal disagreement.

Exuberant, Alexis said, "Isn't it marvelous to once again have purpose? Let's troop upstairs, open a magnum of champagne and toast Demeter's future success."

"Hear, hear!" Sir John soundly thumped Alexander Lemmon's battered desk.

The Raja owned one of the long faces. He pursed his lips and muttered, "Running off with a spacecraft worth upwards of several billion pounds is a crime for which the authorities will have to concoct an original form of punishment."

* * *

Late the following "morning" — the sublunar communities run on homeworld Zulu time — Casey and Laura Chew conducted a high-pitched shouting match in Mandarin that approached the volume and frequency of a verbal duel, not a mere family squabble. Voices raised in the king-sized argument could be heard in Alexis's crowded lunar domicile, and perhaps as far

as the nearer reaches of Sinus Iridum's Level VII. Despite waking several of Alexis' late-sleeping guests, the ruckus apparently resulted from the fact that Casey definitely, without question, wears the trousers in his family. He had explained his future plans to Laura, then stoically weathered the ensuing firestorm of protest. Shortly after noon, Mrs. Chew and their infant son left via the monorail for the Imbrium Space Terminal, heading home to her relatives in San Francisco.

Alexis paid a visit to the private Sinus Iridum investment bank where a portion of her inheritance and investments were held in several trusts. She handed Henry Ogilvie a wad of American new dollars — more cash than he had ever seen at one time — and instructed him to obtain by hook or crook, death threats or whatever else it might take, comprehensive technical and engineering data on GER's twin flagships, *Asgard* and *Valhalla*. She very strongly made a point of not scrimping if it became necessary for him to grease a dozen or more palms.

With a cheery wave, Henry hopped aboard the monorail, heading to the *GrossEuropa Raumschiff* maintenance base in the Sea of Tranquillity. Steve accompanied him to the monorail station, then only as far as the Imbrium Space Terminal near Crater Kirsch, where Sir John, Das and I had landed. The pilot intended to rent a utility pressure-suit, “poke around, see for himself” what varieties of lease-worthy “sky-going iron” was laying around the parking area. He had concocted a semi-plausible fairytale about a wealthy, anonymous Mr. Moneybags who'd engaged him to pilot a chartered ship to Xanadu, and wanted something extra nice because of a party slated to take place on board, and therefore eager to pay for the lessor's lack of curiosity.

It was Dr. Mattingly, however, who gave a sterling performance. Alexis and I were privileged to overhear him use the audio-only phone to call the GER office in Sinus Iridum. A better-than-fair natural actor, the director outdid himself playing Colonel Blimp role.

“Hullo, hullo. I say, Dr. Brent here, Earnest Brent. What's that? Yes, yes; a physician. May I trouble you with a question or two? I've a daughter in service way out in Ganymede, don't you see, and somewhat anxious to pay her a surprise visit . . .”

“What's that? Once again, please, my dear.” Sir John winked at us. “Ah, reservations, of course. Now I understand. No, I fear that would be premature at the moment. Don't bother connecting me just yet. The first order of business I should like to learn about are the particulars of such a venture. May I ask when your next departure for Ganymede will take place?”

He listened again. “Indeed, so soon? Very good. May I inquire as to the round-trip fare . . . ? Er, not necessarily first class, no.” A lengthy pause. “Good Lord! I had no idea of the . . . Thank you very much, my dear; you've been most helpful, but the figure you quoted is totally beyond my modest resources. Thank you again so very much. Good afternoon.”

Sir John switched off and preened himself, a faint scowl playing on his aging, aristocratic features. “Ruddy GER highway robbers only want an arm, a leg, a foot and a hand to book passage for the trans-Jovian satellites. The best news, however, is better than we had hoped. At this moment, *Asgard* is apparently in transit for Earth-Luna, and scheduled to dock, so the young lady told me, in less than two months, lay over a fortnight, then turn about and shape trajectory again for old Jove. We should be ready for our adventure by then, don't you think?”

Alexis and I rushed to tell Casey and the others.

In late forenoon two “days” later Steve returned with word that the pickings were lean at the space terminal. He had located and sweet-talked his way into boarding and inspecting a pair of what he characteristically labeled, “privately owned, chem-fueled sputterbuckets,” either of

which might do in a pinch. One was a smallish craft once owned by some high-roller of an art dealer who plied regularly between Luna and Xanadu, the other an older Lockheed-Martin Lancer someone had converted at considerable expense into a modestly appointed yacht. The wheeler-dealer leasing agent Steve haggled with had informed him both ships were fair game for charter if the price was right. Alexis agreed with Steve's choice, slightly favoring the Lockheed-Martin "yacht," and prepared a letter of credit. The pilot returned to Kirsch to wrap up the deal and take care of the paperwork.

In mid-week, we left Sinus Iridum in the wee hours, Zulu time, and rode the monorail in separate cars, with Alexis wearing a dark fall over her blonde hair, too much makeup, and a slinky sheath dress that made her look more than a touch fast. She acted indecently pleased when a pair of Russian engineers tried to pick her up on the train, then followed her into the space terminal, where Steve was waiting to meet us. The pilot intercepted the approaching threesome and in more than one language told the engineers to get lost and stay lost. Between their fuzzy command of English, and the pilot's overt belligerence, the Russians eyed the laser weapon he had belted at his waist, and went their separate ways.

We straggled out to the chartered ship via slideways running beneath the hardstand, keeping each other in sight, cloak and daggerish nonsense I privately considered a waste of energy. Donning the vacuum gear he had rented, Steve exited through the airlock, climbed the erected ship's external ladder in vacuum, connected and pressurized the umbilical tube. Ushering us aboard sans pressure-suit, he commanded the umbilical to retract after scavenging the air in tube and surface airlock per regulations. In less than a half-hour we were ready to raise ship.

Alexis had discarded the fancy fall and combed out her platinum blonde mane. She idly asked Steve if Spacecraft Control might become suspicious if we vectored toward Earth-Luna instead of Xanadu per the flight plan he'd filed?"

"Not to worry." Going through the ship's unfamiliar checklist, the pilot wouldn't let himself be distracted. "I filed for Xanadu, with a scheduled stopover in E-L to pick up the party-poopers we're supposed to take aboard."

Nobotts, belted into the co-pilot's acceleration couch, said, "All green here?"

"Okay, we're ready to punch it, Skipper. Buzz Spacecraft Control, will you? Tell 'em we're set to lift off soon's they give us a 'go.' The call on this bucket is 7701AXN84."

Nobbots got on the comm channel, and immediately received permission to lift off.

"Alexis, Roger," warned Steve, "best hustle aft and strap in."

Liftoff was mild, yet noisier than I remembered for a conventional reaction-motor-powered vehicle. As soon as we entered freefall, I tucked in and dozed in a foldbunk across the compartment from Dr. Mattingly. Microgravity makes for extra-great slumber; I've no idea how long I slept before Alexis' piercing scream woke me.

"The devil!" Sir John fumbled at the restraint webbing securing him in a foldbunk across the compartment. "Hear it, Shore . . . ?"

"Sounded like . . . I don't know what."

Alexis screamed again, this cry less shrill than before.

I exited the compartment on the fly, caromed off the companionway bulkhead, trying to judge in which direction the excitement was taking place. Hearing the Raja say something in a

husky voice, I pushed off, flying aft toward the ‘midships compartment that doubled as the yacht’s dining lounge, arrested my headlong plunge and froze in the hatchway.

Alexis and Jeff were huddled in midair, clinging to one another. Across the compartment was an array of . . .

Words fail me.

Twenty-four - Menagerie

Not one but *two* Stinky types replete with the pungent odor of spice drifted in midair, their opaque ebony headpiece spheres throwing back dazzling highlights in the indirect illumination. Beside them floated an unseen something encased in a gleaming cylindrical canister large enough to hold a Saint Bernard, or maybe small bear. Next to the canister, a simian lookalike with downy fur the color of a seal point Siamese cat was accompanied by not the least, but far and away the worst specimen: a gangling, greenish skeleton-like apparition clinging to a handhold inside the hatch, dispassionately ogling us with bulging lemur eyes glazed and lifeless as gelatin. The quasi-skeleton was the only member of the gruesome quintet not wearing protective gear of any kind, raising its grotesqueness to about the fiftieth power.

Nobbots and the pilot came sailing in tandem down the companionway from the conning deck, adding to the logjam of bodies including Sir John and me.

“Mother of God!” breathed Steve.

Stinky’s tendrils began to writhe spasmodically. *My children*, it announced in the dead “voice” that once again raised my hackles, speaking only in my mind. *This One is supremely gratified to learn you have returned to mundane pursuits.*

I gingerly edged past the greenish skeleton, making sure it stayed where it was, drifted across the lounge and grabbed Alexis, pulling pulled her close.

“What do you w-want of us?” demanded Alexis, her voice quavering more from anger and defiance than fearfulness. “Have you come to gloat, perhaps complete the slaughter began in Ceres?”

Slaughter . . . ? Alas, my child, you rashly misspeak. Its tendrils weaving faster, the leftmost Stinky bobbed a half-meter closer, giving off a cloying odor of spices that evoked horrific memories. *The action you mention came about through necessity, not malice, and was accomplished judiciously, causing no lasting injury. This One humbly beseeches objectivity in the manner you choose to view the deed that drove you from the planetoid. The rancor in your juvenile minds does not become a species heretofore demonstrating great promise.*

“You have the gall to ask our forgiveness?”

Forgiveness, nay. Merely understanding, my child. Is it logical to harbor undying enmity toward This One, who has labored so diligently to perform deeds deemed mandatory? In This One’s position, you yourselves would no doubt have done much the same.

“Your attack,” cried Alexis, “was beastly, the act of an animal not a ‘true intelligence’.”

As anticipated, emotion invariably overrides your primitive level of rationality.

“In truth,” accused Alexis, “what you did was an ethical and moral outrage, something a ‘true intelligence’ boasting of advanced rationality should appreciate.”

The point you seek to voice by reverting to childish sarcasm is easily defensible. In the ripening of time your kind will assuredly reach the lofty objectives to which you strive, and thus be warmly initiated into the community of enlightened intelligences as emergent younglings. Of this there can be little uncertainty, yet for the present the proper window for the overtly auspicious endeavor you have directed all your energies to achieve must remain closed. Enough for now. Your indulgence is requested while something is explained to This One's associates.

All of us "heard" a murmured concatenation of nonsense syllables, flowing vowels, halting aspirates and what passed for clicking glottal stops. One or another member of the Stinky pair was communicating with its weird of confederates, inadvertently yet automatically tuning us in to what I believe was a spillover of unintelligible gibberish.

Steve eased the hand laser from its holster. "Arrogant SOB," he said, "is showing us off to its pals."

I expected Nobotts to tell the pilot to holster his sidearm. Instead, Paul's only response was to draw his own weapon. "Any hint of a physical threat," he said, dark eyes burning with rage, "you chop right, I'll fan left."

"Check."

Motionless in midair, Nobotts and the pilot studied the spook show with predatory intensity.

Holding Alexis, waiting for the alien palaver to conclude, the hair-trigger poise of Steve and Paul was worry-making. The longer I stared at the filthy, back-stabbing 'This One' creature, however, the angrier I became, too steamed to care what might happen. Under less tense circumstances, the gaggle of aliens would have looked like a ludicrous assortment of sideshow freaks, but not then.

At length Stinky finished its palaver and returned its attention to us. *Our associates, all scholars devoted to the study of primitive and moderately advanced life forms, endorse your kind as most intriguing, and concur collectively with This One's prior judgment. The glowing future in store for your kind awaits only your descendants' maturity. Is that not flattering?*

"Get out, and take these creeps with you!" The pilot brandished his weapon.

Ah, this youngling's raw malevolence is genuine, truly ethnic in its single-minded fervor, providing an apt illustration of the present status attained by your species.

A brief pause ensued, then the telepathic voice continued. *You would be wise to put away your toys. Attempted intimidation by lesser creatures is demeaning, not to be permitted.*

"Leave us!" Nobbots leveled his hand laser.

Alas, more senseless juvenile bravado.

The hand laser vanished from Paul's grasp. He uttered a choking sound

Steve didn't hesitate for a millisecond. A bright ruby pencil of light scissored across Stinky's liverish torso, flashed over whatever was encased in the metallic canister, zapped the skeleton and winked out. An ozone scent cut through the pungent, sublimated taint of spices.

The pilot's hand laser disappeared.

Naughtiness in children constitutes unspeakably rude behavior. This One is hard put to invent a reason for allowing your impetuosity to go unpunished. Stinky's tendril "fingers" began writhing faster while conducting another indecipherable confab with its companions. *This One's associates counsel that you be left to your petty devices sans chastisement, for which you may*

consider yourselves most fortunate. Had the decision been left solely to This One, an object lesson would surely have been in order. We shall now bid you farewell.

A succession of soft, all but inaudible pneumatic pops signaled the mass departure. We were suddenly alone in the ship's dining lounge.

The Raja expelled breath in a long, heartfelt sigh. "Hope to God we've seen the last of that bloody-minded goblin and its friends!"

Trembling in my arms more from fury than fright, Alexis said haltingly, "Whatever . . . are we *dealing* with? Steve's laser was suddenly . . . *gone*, as was yours, Paul. Neither that liverish monster, nor any of the other . . . things batted an eye when lasered."

Paul nodded, rubbed his wrist and said grimly, "Assuming they had eyes."

The pilot found it difficult to speak. "That . . . single charge," he said weakly, "packed enough joules to slice sheet steel."

"Casting your spear at an armored *conquistador*," remarked Nobotts drily, "must have scared them away. I suppose we were fortunate to be left unharmed."

Pale and shaken, Mattingly remarked about wondering if "the creature" had caught any glimmer of their current plans. "Seems quite able to read minds, you know. We've seen ample demonstrations of that faculty."

"Might not matter," I said. "We may've been too angry and scared to think of our plans."

Sir John agreed. "I do hope you have the proper slant on that, Shore."

"We can forget about surveillance by the U.N. Special Police," suggested Das, "and concentrate on surveillance by telepathic alien monsters from the stars. Stinky and company seem able to track us wherever we go, and know whatever the hell it is we're trying to do. How they manage it we'll probably never learn."

Alexis shuddered. "I need a drink."

Support for her proposal was unanimous. Leading the way aft to the galley, Sir John halted suddenly, and and put a finger to his lips.

Hands folded serenely across his rotund belly, Casey Chew snored softly in a foldbunk. He had slept through the alien invasion.

* * *

Somewhere in mid-trajectory between Luna and E-L, Sir John surprised us by changing his mind. He directed Steve to perform a mid-course correction and vector directly to Galileo, a destination change Jeff and I had frowned upon as astronomers, about which we'd believed the director would feel the same way because our chartered ship's maneuvering thruster flare in docking could affect photography in progress, and ruin someone's delicate optical observations. The director overruled our objections by getting on the observatory monitoring frequency and instructing his staff to warn whoever might currently be using the hundred-meter instrument's long-exposure module.

Steve oooched our "yacht" in slowly, matching orbital vector and velocity with Galileo, and killed the ship's modest remaining momentum with a single two-second burst, and presto! We were co-orbiting not many meters from where our old rattletrap bus was docked in its usual slot. The pilot went aft, suited-up and zipped across to the main structure on his suit's jet-pack thrust. In minutes the ram telescoped out, locked magnetically to the yacht's rotund nose and drew us slowly inboard. Once mated to Galileo via the umbilical tube, Sir John led the way

through the main airlock in single file, and immediately got on the intercom, calling all personnel to gather in the refectory.

Thinking no purpose would be served by trying to pull the wool over the eyes of the observatory's competent professional personnel, he divulged just enough information to settle everyone's minds, firmly explaining how he counted on their loyalty and integrity to not leak our presence to *anyone*. Elucidating further, he announced that we were involved in an innovative project, and would be working in Galileo for a month, or possibly longer. The astronomers and staffers were far from naïve; each guessed the nature of said "innovative" program, especially when Mattingly announced that we invaders were to have the run of the facility, and were to be shown every imaginable aid and courtesy.

He introduced Alexis, who earned a round of earnest applause which almost equaled the vigorous enthusiasm demonstrated when he presented Dr. Kenneth Clarke "Casey" Chew. The director went on to apologize for the need of total secrecy, and explained that Dr. Chew would be monopolizing the electronics lab for most of the period in question. It was easy to see that the news bent a few noses out of joint, yet no one objected, bowing to the director's wishes.

Jeff and I renewed acquaintances with several colleagues. At the close of the shift, the bus returned from E-L carrying the second-shift staffers, scientists and administrative workers. All five of us went aboard and rode to Earth-Luna. In transit, I had to listen to the pilot kid Alexis, saying she'd looked like a Gypsy princess in the dark fall, with mascara obliterating her pale blonde eyelashes.

We spent two subjective "days" closeted in the Mattingly suite, total privacy assured by the elex security screen Steve set up. We devoted every waking minute to formulating, scrapping, amending, and reformulating tentative moves, then solidified the prospective moves, as well as eliminating procedures judged superfluous. Nobbots and the pilot hashed and rehashed alternative derring-do schemes for breaking into the impounded ship and recovering the n-space operational gear. Sir John spent session after session at the vidicom terminal, tracking down and covertly as possible rounding up selected members of Demeter's staff. He never failed to conclude with a cryptic sentence or two inferring, though not of course revealing, what the summons was all about. At minimum, it was argued, a baker's dozen of Demeter's best people, and preferably handful more, would be required to adequately man a major vessel with the size and complexity of *Asgard*.

One knotty problem cropped up, knotty because it had nothing to do with hijacking the huge GER vessel, rather by finding some way to buy Casey the number of hours he estimated it would take to properly interconnect the n-space operational equipment, wring out the system and tie n-space driver subsystem into the torch ship's power source. This post-pirating interval, at best indeterminate, was deemed hyper-critical, since it would be mandatory to complete all phases of installation and proof of readiness to Chew's satisfaction before a U.N. military ship could hope to intercept *Asgard* in the normal continuum and terminate Demeter's final chance for success.

The Raja and I worked our butts off plotting one evasive trajectory after another. Catch was, each and every proposed vector and velocity plot had to be compatible with our ultimate goal — an FTL vector toward far Centaurus. In addition to our maddening calculation the

tantalizing uncertainty of whether or not *Asgard* would prove adequate power-wise continued to hang over our heads for another half-week.

Late one evening Henry Ogilvie rang the Mattingly suite's door chime. He swept into the parlor grinning and laid a pair of digitally recorded dime-size discs on the coffee table. "Got it, Miss Lemmon!" he proudly announced. "They're dupes, best I could hope t'get on short notice. Hate to tell you, but getting my hands on that data cost a bundle 'n a half."

Alexis hugged him. "What you've obtained is absolutely beyond price, Henry. The loose change, if any remains, is yours. You've earned the bonus twice over."

Henry blushed.

Casey scooped up the discs without a word, patted Henry on the back and marched into the director's study, where he woke the computer and began bringing up the data on an old-fashioned flat panel screen. Searching the operational index, he found what he was looking for, and began giving Das and I lists of numbers to crunch. Now and then he turned aside to jot down other pertinent data, and resumed clicking from frame to frame. In little more than a half-hour, he perked up, grinned from ear to ear and declared, "Power in excess! More than plenty. Get devices, cabling from ship, Nobbots. Then, we go!"

The task of retrieving the precious electronic gear from under the nose of U.N. Special Police bound to be maintaining surveillance struck me as an exceptionally hairy task, and one that would have to be handled delicately. Steve and Paul put their heads together and held what developed into a council of war. They ended up vigorously debating the feasibility of the pilot's restated proposal to perform what he called "a midnight requisition." Henry volunteered to pour a tad of bourbon over his jumpsuit before floundering around the nadir dock area to reconnoiter, hopefully determine if guards were still posted, and if so how securely the impounded ship was being watched. After considering the potential ramifications of Henry's suggestion, Paul nixed that notion, saying it would be foolish to dare attracting notice in any way, shape or form.

The hour grew late. Weary of all the talk-talk minus any sort of decision, Steve suggested that he and Paul mosey down to the nadir berthing stack themselves and make one casual pass to learn what they could about the lay of the land, the position and number of guards, what video coverage there was, if any, so forth and so on. More or less backed into a corner by a crying need to reap all pertinent information available, Paul finally bought into the plan. He asked Sir John if there were any suitable jumpsuits or coveralls he and Steve might borrow.

Mattingly was happy to oblige, except the one-piece tan jumpsuit he handed Nobotts turned out to be a half-size too small for his muscular, extra-large frame. Unfazed, Paul struggled to don the one-piece garment, looking as if he'd been poured into it. He and Steve slipped out of Mattingly's suite quietly, leaving the rest of us with no choice but to wait, and wonder, and then wait and wonder some more.

Almost three anxious hours slipped away until the pair returned long after the rest of us were beginning to suspect they had been nabbed in the act.

"You gave us an terrible fright," said Alexis. "What took you so long?"

Steve's salty grin flashed on and off. "Not a thing. The matrix module, black boxes, cabling and spare circuit boards are stowed aboard the bus. Boosting them out of that packet in the dark was no piece of cake, but we'uns did the deed."

"You've recovered *all* the items?" demanded Sir John.

Squirming to get out of the skin-tight coveralls, Nobbots gritted his teeth and grunted, "Ship's docked where we left it, in nadir berthing stack." He permitted himself a wolfish grin. "My guess, is that as time wore on the U.N. got tired of posting guards to what they must've considered was little purpose. The main hatch was sealed and alarmed. We decided on the spot there would never be a better time get the job done. We jumpered the alarm circuit, broke the seals and stole aboard like thieves in the night."

"Unbelievable!" Mattingly shook his head.

Steve said knowingly, "Hey, the skipper and I know the inside of that packet like your tongue knows the roof of your mouth. The damaged kit 'n kaboodle was stowed where we'd put it, in the forward hold. That gear probably hadn't been there touched since we loaded it aboard after chasing it halfway round Ceres. Had to use a sling to pull out the matrix module; too big 'n awkward to be manhandled."

"Wasn't that awfully difficult?" asked Alexis.

"Not too tough, really," said the pilot. "Under microgravity it's a matter of start and stop the load, except that you damn sure have to use proper leverage to arrest an item once you've set it in motion, or maybe get crushed by it. Worst hassle was the dark; no lights aboard. We had to do everything feely touchy, with only a smidgen of help from Paul's pencil flashlight."

Speechless, Alexis couldn't believe what she'd been hearing.

"After stowing the boxes aboard the bus," said Nobotts, "we went back and fiddled the seals on the ship so they'd look unbroken to casual passers-by. Now we have to pray no one learns the items have gone missing."

Beaming, Casey made a point of shaking Paul's hand, then energetically thumped the pilot's back. "Good work, boys!" was the sum of his endorsement.

During succeeding weeks, several of the more hard-nosed members of Demeter's widely scattered crew dribbled into Earth-Luna Station. Alexis and Dame Margaret alternated the task of calling to make reservations in Sir John's name, arranging hotel or hostelry rooms for the less recognizable members of our Demeter team. But a few usual suspects, the ringleaders, were too well known publicly, and therefore forced to badly crowd the director's quarters. Dame Margaret was a good sport about it. She outdid herself trying to make us as comfortable as possible.

Going out to the observatory in the bus, Casey rode herd on his prized n-space gear we had repacked in anonymous, unmarked plastic cartons. Wasting not a second, he went right to work in Galileo's electronics lab the instant the units were unpacked, doing everything himself mostly, with two techs assisting the wiring and repairs, stopping only at infrequent intervals to eat and sleep. Sixteen subjective "days" after the equipment and cabling arrived in Galileo he performed a trio of thorough systems checks and pronounced the black boxes intercabled to the intercabledmatrix module one hundred percent functional.

While Casey was in the middle of doing his round-the-clock duty in the observatory's elex lab, *GrossEuropa Raumschiff's* massive torch ship *Asgard* docked at Earth-Luna Station and proceeded to disgorge passengers, freight and several cartons devoted to scientific experiments returned from the Ganymede research facility. Jammed like a school of sardines in Sir John's study, fifteen of us studied the disembarkation and subsequent offloading over the closed-circuit holovision channel Mattingly was privileged to use as Galileo's Director.

Between times Alexis and Steve made two discreet transits to Sinus Iridum in the chartered yacht, where Alexis had solicited the services of an aging seamstress who was paid more for her silence than craftsmanship. Ten fair to middling replicas of green-and-gold U.N. Special Police uniforms were shipped back to E-L and mostly secreted in the Mattingly's spacious walk-in closet, with the overflow under wraps in the dressing room.

With everything presumably in readiness, we went over the scenario and associated timetable a minimum of ten more times. Using the secure computer link to Galileo, the Raja and I checked and re-checked the optimum "avoid-the-U.N.-military" trajectory we had devised, and then re-computed it again from scratch in order to double-check the result. Every hijacker in our gang was as ready as he or she would ever be, except for one major pothole that unexpectedly appeared in the successful piracy roadway. Once we had commandeered the huge GER torch ship, there was apparently no practical way to bring aboard *Asgard* the re-crated, re-cartoned n-space gear and cabling crowding Galileo's electronic lab. A half-dozen potential means and methods of transshipping the cumbersome boxes in timely fashion was discussed, cussed, proposed and subsequently dismissed. Time passed, and the problem remained unsolved.

"Only hang-up in the whole bleeding getaway operation," grouched Steve, "is heisting that stuff out of the observatory and stashing it aboard the big GER packet. People move fast when they're goosed," he summarized, sounding frustrated, "but once we've hijacked *Asgard* it'll take way too much time we won't have to transship the blasted units, hook 'em up and wring 'em out. Any of you come up with a hot flash about how to pull it off, don't hold back the good news."

Staring at the holotank, I watched the passengers disembark from *Asgard* along with Sir John and the Raja. I put my mind to it, stewing about the problem of transferring the goods from what every conceivable angle I could think of, and came up empty. Displayed in the tank a little later, longshoremen began supervising the offloading of a netloads of cargo being carried via a suspended conveyor belt out of the ship's aft hatch, a purser drifting alongside to check off waybill numbers against a hand-held electronic manifest. Beside me, Sir John grunted unhappily, picked up a the remote controller, preparing to switch off reception.

Das stopped him by loudly clapping his hands. "Cargo!" he cried. "That's the answer!"

Sir John frowned. "The answer to what . . . ?"

"We tote all the repackaged items back here to E-L in the bus, address them to some mythical research facility, care of Ganymede Corporation, and pay the hefty freight charge. When we strike, Casey's gear will already *be* aboard *Asgard*. We won't have to lift a finger."

"Capital!" Mattingly slapped his knee in delight. "At times, you show definite signs of promise, Jefferson."

"Beautiful!" Upon being told of Jeff's inspiration, Paul closed his eyes, his features blissfully expressionless, but the enthusiasm in his voice came through loud and clear. "We have trouble seeing the forest for all the tree trunks. Steve, take two men with you out to Galileo. Check the re-crated items and get back here on the afternoon bus. We'll send Henry over to the GER freight office in the morning to take care of the paperwork, and pay the tab."

An hour later Nobbots snapped his fingers, commanding the attention of the crew members crowded into the Mattingly's parlor. "The final scenario," he declared, "calls for running through the drill tomorrow morning as rehearsed. Afterward, and for the next several days, we'll repeat it again and again, and finally in costume . . . er, uniform, and all the stage

dressing. In the meantime, I want every one of you slated for U.N. Special Police duty to feel at home wearing the green-and-gold uniforms. Feeling self-conscious could give away the whole show. Now then, everybody take off and doss down, get all the rest you can.”

The meeting broke up into chattering groups. When most of them were gone, Dame Mattingly served coffee with helpful Henry’s assistance.

“Sure glad it’s *Asgard*,” the Raja said, sounding preoccupied, practically philosophical. “I’d really feel spooked if it was the other GER ship, *Valhalla*.”

Alexis directed a quizzical look his way. “Why do you say that, Jeff? What difference would it make? For all practical purposes, those twin ships are identical.”

“*Asgard*,” the Raja said woefully, “is the Norse ‘Home of the Gods.’ *Valhalla* is the gloomy hall where Odin supped with fallen warriors, and *that* connotation I don’t like.”

Twenty-five - Last Minute Preparation

The nerve-wracking hours just before we made our move inspired the most traumatic, mind-bending case of nerves I’ve ever experienced. Wearing green-and-gold uniforms replete with Special Police crossed-sabers-and-olive-branch shoulder patch insignia, ten U.N. “cops” joined the rest of us crowded in front of the large holovision tank in the Mattingly’s parlor to watch closed-circuit views of GER prepping for *Asgard*’s departure.

Das was the eleventh space pirate on the “cop” team, but if I hadn’t known it would have been difficult to recognize him. The Raja had overdone the “native costume” he had invented by a full order of magnitude. A less-than-clean *dhoti*, and a frayed, half-sleeved vest and shawl complemented the “rag” wrapped around his head. Unshaven for most of a week, his scruffy beard and whiskered jowls lent a convincing scruffy touch to his overall appearance. He caught me staring at him, and grinned sheepishly. “If mother could only see me now!”

Antsy about what was in store, all I could think to say was, “Let’s spare her that.”

On the other hand, fresh snow melt flows in Paul’s veins and arteries. Teasing Das in his unique way, he told the “terrorist” with a straight face he looked perfectly adorable.

As Galileo’s director, Sir John enjoyed closed-circuit access to the E-L utility holovision network, plus a secure communications link to the observatory. Nobotts surfed channels, absorbing each scene intently, then switched around repeatedly, viewing one area after another, in and around the nadir berthing stack, capturing brief glimpses of our “Main Street,” the Midway esplanade encircling the hub of E-L’s gigantic rotating “wheel,” collectively poking our video nose into various points in and about the radial spokes, and inevitably returned to views of our goal, bringing up scene after scene in the nadir stack where *Asgard* was berthed, commenting not at all on any scene, just silently evaluating crowd sizes, the number and disposition of patrolling U.N. Special Police. Satisfied with placid scene after scene, he punched the remote controller, accessing the Galileo link.

The holographic image of Dr. Mattingly instantly jelled in the tank, looking careworn. His visage brightened when Nobotts’ image appeared. “I say! There you are. One hopes the report is coming along smoothly?”

“On schedule,” Paul replied woodenly. “It should be ready for your eyes in roughly . . .” He glanced at his wrist chronometer. “Oh, forty or fifty minutes.”

“Splendid! I very much look forward to reading it.”

“Right you are, sir. Until later, then . . .” Nobotts disconnected and began to switch around again area by area, level by level — the spokes, the Midway, the zenith and nadir dock areas — constantly sizing up the lay of the land in the E-L complex one final time. At last he shut down the holotank, and rose. “Everything seems outwardly quiet, normal. First pair, get ready to go in five minutes. You others begin getting into your coveralls. And remember: we’ll want lots of happy chatter in the lift going down to the nadir berthing stack.”

The minutes crept past at an achingly glacial pace. Sounding laconic, Nobotts eventually said, “Time!”

We eased out of the Mattingly suite in pairs, with Paul, the Raja and I hanging back to bring up the rear. Das injected life into the need to chatter with an anecdote that started out well but never quite got anywhere. None of us heard a word he said.

No ship was berthed in Nadir Dock Nine adjacent to *Asgard*’s berth. The secondary group of hijackers, eight U.N. “cops,” had taken, random alternate routes, and soon joined us in the unused dock’s boarding compartment, where we stayed out of sight during a second ulcer-making interlude, the “cops” sweating rivulets of discomfort with coveralls worn over their unvented police uniforms. Discomfort aside, I spent the interminable minutes that dragged past watching Nobotts psych himself up for the coming charade. It was difficult to realize how nervous he actually was until he began consulting his wrist chronometer much too often.

“All right,” he said calmly, “lose the coveralls.”

We skinned ourselves in midair, stuffed the garments into plastic trash bags, then stowing the bundles behind the boarding agent’s cantilevered desk. Paul wordlessly cued the pilot, who cracked the airlock hatch, peered cautiously into the boarding concourse, and ducked back inside. “Clear. A pair of longshoremen’re gabbing near Dock Four. No uniforms in sight.”

Paul did a hasty check of our collective appearance, and curtly made one or two minor suggestions. “This will come off,” he said, his voice reassuringly steady, “just as clean and simple as a rehearsal *only* if everyone stays cool. Do not — repeat, *not* — take action of any kind on your own initiative. If things begin to get dicey, like they’re about to go wrong, let me handle it. Understood?”

There was a chorus of subdued ayes.

“Enough talk, let’s do it!” Nobotts pulled himself out of the airlock, gave one long-armed heave on the freefall safety line and sailed along concourse. Strung out in single file, the rest of us followed close behind him. The Raja, clad in his peculiar “native” costume, and the other pair of “cops” escorting the “terrorist” followed hand-over-hand in the middle of the pack.

A pair of *GrossEuropa Raumschiff* passenger agents working inside the target dock’s open airlock looked startled at the sudden appearance of Paul and the U.N. Special Police. The closed-circuit monitor behind them displayed the embarkation lounge, where a gaggle of just over a dozen passengers awaited notification to board.

An agent unbelted hastily, left the desk and came forward. Paul flashed his counterfeit ID. “Inspector Johnson, UNSP. Has *Asgard*’s master come aboard?”

“Uh, yessir.” The agent swallowed noisily. “He’s on the conning bridge, prepping for —”
“Call now! Get him out here on the double.”

“Sorry, Inspector. The captain’s extremely busy right now. Is there some problem I can help you with?”

“Call him! Do it now, now, now!” ordered Nobotts, an insistent edge apparent in the harsh yet well-modulated command.

The youthful agent decided not to argue. He pulled himself over to the intercom panel just inside the lock chamber, next to the mated umbilical tube.

“You, and you!” Indicating two “cops,” Nobotts instructed them to close and secure the outer airlock hatch, and then post themselves out in the corridor. “Absolutely no one comes in, absolutely no one goes out until you hear the order from me.”

“Your pardon, Inspector,” a second GER agent found the nerve to say, “but the passengers will be boarding in a few —”

“No passengers will be allowed to board this vessel,” contradicted Paul. “We have a serious emergency. Where is the captain?”

“On his way, sir. He wants to know why . . .” The uniformed GER agent broke off, transfixed by an apparition. He stared mutely as a pair of U.N. “cops” roughly escorted the “terrorist” into the boarding compartment. Jeff noted the attention he was attracting, and mouthed something vile in Bengali. He struggled feebly with the captors restraining him.

The rest of us hung there in midair, trying to look grim and scared. In my case, that required no acting ability whatever.

A distinguished older gentleman whose silver mane matched the four silver stripes on the sleeves of his dark blue tunic tugged his way along the freefall safety lines strung into *Asgard*, and halted in the hatchway to look us over. He frowned.

Paul flipped open his wallet, showed the master his fake U.N. buzzer, letting him to look his fill. “Captain, we have reason to believe a nuclear device has been smuggled aboard your vessel. Please order your crew and anyone else who might be on board to evacuate immediately.”

“But we are about to —”

“Do it at once, sir!”

With more than a decade of command authority under his belt, the senior GER captain had acquired the habit of issuing orders, not accepting them; nor was it his habit to evaluate any happening of a decidedly serious nature at face value. Regarding Nobotts narrowly, his only reaction was a contraction of his bushy, gray shot brows.

* * *

In the act of framing a retort, the captain retreated into open-mouthed silence when the Raja shouted something in Bengali and struggled harder to free himself from the grasp of the two “cop” He shrieked again more loudly and, wild-eyed, redoubled his struggles.

“Quiet him!” directed Nobotts.”

As had been scripted, Pickett clapped a hand over the Raja’s mouth, and quickly pulled back, cursing, when the packet of red dye concocted by Dame Mattingly squeezed realistically between between the fingers of his right hand.

Nobotts radiated cold fury. “Captain, this . . . *animal* is wanted in a half-dozen countries. He was apprehended after sending an encrypted message. We were able to identify and locate him due to faulty encryption. The decode leaves no doubt about his guilt, forcing me to implore you, to beg if necessary. Please, please, boost this ship away from the station at once. There are

women, children in there.” Nobotts gestured at the holo tank depicting passengers in the boarding lounge.

As Nobotts had anticipated, the captain refused to buy the displayed goods for sale at first sight, nor pay a great deal of heed to Paul’s warning. “I must call my office,” he said, a barely discernible accent evident for the first time.

“Under no circumstances, sir,” declared Paul sternly, “will I permit you to place a call inboard. I have my orders. Creating panic inside E-L would only make matters ten times worse than they already are.”

“What you ask,” objected the four-striper, “will be impossible without approval from —”

“*Listen* to me, Captain. You leave me no choice but to invoke U.N. jurisdiction. It is not only mandatory, but *imperative* for you to consider me the immediate authority in this extreme emergency. You are hereby ordered to move your ship away from the station at once with neither argument or any delay. A UNSP bomb squad will be coming aboard once we’re in free space, at some reasonably safe distance from the station.” He gestured at the glowering Raja. “Once there, I plan to make certain this bastard tells us where the weapon is hidden, and hopefully disarmed. The one thing I absolutely cannot permit is to let him succeed in destroying Earth-Luna Station, and everyone inboard, including the passengers slated to board your ship.”

No fool by anyone’s measure, the captain went through the process of weighing Paul’s caveat against the evidence of his senses. Although tough-minded, experienced and as nominally unflappable in a critical situation as most other veteran spacecraft masters and commanders, a flicker of fear had invaded his pale blue eyes.

The Raja made up the captain’s mind by screaming something unpronounceable, then he hawked and spat at Nobotts. Microgravity ruled in the boarding compartment; the gobbet of spittle flew in a perfectly flat trajectory, narrowly missing the four-striper’s portly frame.

Asgard’s master loosed a sibilant curse. “I intend to stay with my ship,” he said in a brittle, gruffly sincere tone of voice.

“As you wish, sir.” Paul dipped his chin, acknowledging the other’s gallant decision. “Above all other considerations, your ship *must* be moved as quickly as is humanly possible. In issuing the evacuation order, please mention no details to the crewmen and women, not one word about the nuclear device thought to be, er . . . I’m sure you understand why that is mandatory.”

“I . . . yes, Inspector. Yes, certainly. I’ll summon the crew. My second officer must also stay aboard to man the astrogator console. I am certain he will agree to —”

“Negative!” declared Paul firmly. “We’ve no right to permit unnecessarily risking the lives of any civilians. That’s why I summoned Lieutenant Stephens after being alerted. He has an unlimited license. Quickly, Steve, show the captain your credentials!”

The pilot shoved himself forward and allowed the skipper to inspect his doctored license. The older man eyed Steve with grave skepticism. “You are so young to have attained such a degree of proficiency, Lieutenant. Yet while I am sure you are qualified, I prefer my own second officer, someone familiar with *Asgard’s* command and control functions.”

“Sorry, sir. I really must insist,” said Paul. “It is your ship, and you’ve chosen to remain aboard. Fine! But your second in command is a civilian, and will not be permitted to stay aboard, nor should you yourself think about allowing him to do so.”

To no avail, the captain made a valiant attempt to stare down Nobotts, and did not succeed. “It shall be as you say, Inspector,” he finally said,” pulling himself over to the intercom panel. “Attention, attention! Captain Leutemann speaking. All hands are to assemble at once in the boarding compartment. All hands, without fail — repeat *all* hands — will evacuate the ship immediately!” He repeated the order in German, then again in French, and popped off the intercom switch.

Writhing in the firm grasp of Jerry Pickett and another bogus “cop,” that murderous, villainous revolutionary Dr. Jefferson Belal Das mouthed obscenities in what I again took to be Bengali. I thought he was overacting very badly.

Captain Leutemann pinned the Raja in his riveting gaze, his expression that of someone who has just seen a repulsive rodent crawl out of the ship’s bilges. “Who is he, Inspector? You mentioned learning his identity.”

“A professional assassin among other occupation,” informed Paul coldly. “I was told he had only been seen twice since stealing out of Pakistan in secret.”

“How and why are vermin like him allowed to enter space?”

“His presence is . . . well, I’m afraid it’s partly my fault,” replied Paul. “In a way, I’m responsible for what has taken . . . For what might take place.”

The four-striper nodded. “I credit you for owning up to it, but under the circumstances it is very small consolation.”

GER personnel began trickling out of the umbilical tube into the compartment — an oddly assorted lot of, cooks, stewards, ship’s officers, crewmen and women, and stewardettes. The last group to emerge was trailed by a balding, middle-aged man with three stripes above the cuffs of his tunic. The airlock’s weightless confines were now jam-packed with a jumbled mass of arms, legs, torsos and faces.

“*Ist alles, Reinhard?*” demanded Captain Leutemann.

“*Jawohl, Herr Kapitän.*” Puzzled, the first officer frowned at sight of the collection of the green-and-gold uniforms. “*Gibt es ein Problem?*”

“*Das könnte gesagt werden.*”

Paul asked the captain to tell his crewmen and women to join the passengers in the embarkation lounge. “Have them mingle with the passengers, and pass along word of a short departure delay.”

A film of perspiration beading his high forehead, the senior captain began issuing orders in a way that made me judge *Asgard* to be a tautly run ship. None the crewmen or women questioned the reason for such a surprising instruction. The airlock cycled open, and the working GER personnel began streaming out into the boarding concourse. Last to depart were the passenger agents we had burst in upon at the start. Nobotts halted their passage, asked the pair to stay behind until the others were beyond earshot.

“If one word of a bomb scare leaks into E-L,” warned Paul in his best authoritative manner, “you two will be held responsible, and will be brought over on charges of aiding and abetting terrorism. The penalty is exactly the same here as anywhere in the globe — a speedy trial before the U.N. High Court, and a compulsory sentence of summary punishment. Have I made myself perfectly clear?”

Neither of the agents protested in any way, and departed looking extremely reluctant to give anyone directions to the nearest restroom.

“Move!” ordered Paul, herding us through the umbilical tube and into the ship with Captain Leutemann leading the way. The airlock hatches were closed behind us, and the main hatch giving access to the umbilical tube secured from inside against unwarranted entry.

Tugging my way along the ship’s main fore and aft passageway, I overheard the captain ask Paul about the terrorist. “Inspector, I assume you mean to, er . . . work on him, attempt to learn where the device may be hidden?”

“I have some an idea or two along those lines, sir.” Nobotts sounded grim, all business.

“None of them very gentle, eh?”

“It’s not an occasion for gentleness, Captain.”

“There we are in wholehearted agreement.” *Asgard*’s master sounded as grim as Paul.

“I hope you’ll be willing to look the other way, Captain.”

The four-striper sounded as if meant it, saying, “We shall not worry about that.”

Twenty-six - Space Pirates

The Raja’s lusty screams set my teeth on edge, but failed to distract Captain Leutemann and Steve from frantically completing the huge torch ship’s interrupted prelaunch checklist. I thought Jeff turned in an exceptionally fine acting performance; between the screams and agonized moans coming from the astrogation compartment abaft the conning bridge, he loosed intermittent, finely tuned sucking sobs that would have made anyone not in the know believe he was being slowly sawn in two.

Steve and the four-striper worked in a frenzy punctuated by the senior GER captain’s occasional exclamations of surprise when Steve demonstrated prompt compliance with directives, proving his thorough knowledge of the ship’s supposedly unfamiliar command and control system. It was no surprise to me or my fellow space pirates; during the preceding weeks, the pilot had spent untold hours studying the *Asgard* microfilm data obtained expensively by Henry at GER’s Tranquillitatis maintenance facility, and he knew the ship’s workings almost as well as the captain. They finished in another ten minutes.

“*Asgard* is primed for deep space,” announced the captain. “Has that bastard talked?”

Paul grimaced unhappily. “He lost consciousness minutes ago, sir. Take us out!”

Captain Leutemann swore a frustrated oath. He gave the C&C Console’s illuminated systems readouts a final, rapid once over, and opened the communications link. “E-L Traffic Control, this is GER *Asgard*, Hull 45389, Captain Leutemann speaking. Request immediate undocking initiation. Please confirm without delay. *Asgard*, over.”

After a faint dit of static and second or two of silence, the speakers came to life and a cool, professional baritone filled the conning bridge. “Copy, GER *Asgard*. Scheduled departure is in one hour and forty-six minutes. No revised Flight Plan has been filed. An undocking crew is not yet — repeat, not yet — standing by. Suggest a Deviation Request be filed. Traffic Control, out.”

The captain’s mouth took on a determined set. “Traffic Control,” he called sternly, “we have an extremely serious emergency aboard *Asgard* that endangers not only my ship, but the

entire Earth-Luna complex. Urgently request emergency undocking procedure be initiated now, now, now! *Asgard*, over.”

Heart-tugging seconds of silence ensued. A new voice much less impersonal and much more energetic flooded the conning bridge. “GER *Asgard*, Chief Controller Regen here. Please state the nature of your emergency. Over.”

The captain swiveled, directed a helpless stare at Nobotts.

“Go ahead, tell him, sir!” advised Paul. “Use my authority. Make him understand there isn’t one second to waste. Caution him not to spread the word, create panic inside E-L.”

Leutemann nodded. “E-L Traffic Control, U.N. Special Inspector Johnson is here with me at the conn. He and his UNSP men have arrested and brought aboard a known terrorist suspected of planting a hidden nuclear device aboard *Asgard*. It is absolutely imperative that my ship depart E-L without delay, and co-orbit at a distance greater than the estimated destructive radius of such a weapon. We *must* be undocked with all due haste, repeat *all* due haste. *Asgard*, over.”

The captain turned and regarded Nobotts a good deal more intently than before, a fresh glimmer of suspicion sharpening his gaze. “Inspector,” he asked, “how was it possible for a nuclear device to be smuggled into Earth-Luna, and then aboard my ship? Radiation detectors are employed in every freight and passenger arrival and departure terminal, as well as all lunar space terminals.”

“We haven’t yet learned how it was accomplished, sir.”

Leutemann cogitated. Apparently considering Paul’s response less than satisfactory, he was in the act of voicing an objection when the speakers erupted with a third hoarse voice. “*Asgard*, UNSP Chief Inspector Wynette speaking. Captain Leutemann, please open a video channel to your bridge. I insist upon viewing and speaking with this . . . Inspector Johnson. No officer with that name is currently posted to E-L UNSP duty.”

The captain’s head jerked around as if he’d been jabbed with a hot poker. Directing a blistering, accusatory glare at Nobotts, he reached toward the video selector switch on the curved command and control console, only to be brought up short by the emission bell of Steve’s hand laser when the pilot prodded him in the ribs.

“*What is the meaning of this?*”

“Out of the acceleration couch, Skipper!” Steve used his free hand to unbelt Leutemann from the command pedestal couch, and shoved him into the waiting arms of two “cops.”

“*Hijacking* my vessel?” cried the captain in abject disbelief. “That is insane!”

“Calm down,” suggested Nobotts. “No one will be harmed.”

“This is impossible! How do you fools expect to get away with anything so totally outrageous?” Leutemann shouted a string of imprecations, half in German, peppered with coarse words in English. As he was bodily hauled from the conning bridge, he called back, “It makes no sense to attempt this . . . this outright *idiocy*! You are demented, each and every one of you!”

“You’ve got that right, Cap.” Steve’s patented cocky grin was in evidence. “All God’s chillun know we spent weeks peeling shadows off the wall in the Sinus Iridum looney bin.” He assumed the conn with an air of authority, belted in by locking the restraint harness. “Say the word when ready, Skip. This big, fat packet’s ready to boost.”

“First we’ll give them an option to do it the easy way.” Nobotts reopened the comm channel. “E-L Traffic Control, GER *Asgard* is now under my command. Names are meaningless,

and identifying myself would be pointless. I intend to take this vessel into deep space, and there are no practical means at your disposal to prevent me from doing exactly that.”

Over the open channel an indistinct hullabaloo could be heard breaking out in E-L’s Traffic Control Center.

“Should you attempt to board this vessel,” added Paul, “you will find the ship’s main airlock firmly secured against entry from inside the umbilical tube nest, where the tube has been detached and unshipped. I demand that you extend the undocking ram and impart departure momentum to *Asgard*. Unless this demand is met at once, *Asgard* will back out using its forward attitude jets, and damage to the station’s nadir berthing stack will ensue. Your response must be immediate, without delay of any kind. GER *Asgard*, over.”

Holding our collective breath, we fledgling space pirates waited to learn if the powers that be were gullible enough to swallow the bait. Frying a portion of the berthing stack, and incurring the wrath of those inboard was the very last thing any of us wanted.

Tempers were no doubt flaring brightly in the E-L Traffic Center. When the bridge speakers came to life again, a good deal of scrambled background babble could be overheard. “*Asgard*,” declared a new speaker who exercised a more pompous baritone voice, “you are hereby ordered to open the main airlock hatch and surrender the vessel immediately. Hoping to make a run for it and escape pursuit would be the pinnacle of futility. There is absolutely nowhere *Asgard* can be taken without assured recovery within hours, a day at most. Open the ship at once! Surrender the vessel!”

“Traffic Control,” was Paul’s stoic response, “you have thirty seconds to initiate standard undocking procedure. If you fail to comply, or refuse to do so, you leave me no alternative but to fire the forward attitude jets and break free.” He closed communications to incoming calls, but left the outgoing channel open and soberly began a countdown: “Twenty-nine, thousand and twenty-eight . . . thousand and twenty-seven . . . thousand and twenty- six . . .”

The countdown sagged to eleven seconds remaining until the zero hack when I felt a gentle nudge, and the ship began moving.

A delirious cheer swept through the conning bridge. The undocking ram telescoped outward, magnetic couplings relaxed their grip and GER *Asgard* backed gradually and sedately into vacuum.

* * *

We continuously monitored all commercial and unencrypted military frequencies to intercept the huge volume of electronic chatter coming our way as well as every other way. E-L wasted breath yelling at us while *Asgard* was under boost, burning away from the station. A half-hour later, just as Steve completed the ship’s orbit change maneuver and acquired our old bus on Doppler imaging radar, the military got into the act big time. Imperious voice commands rang resounded in the conning bridge, ordering *Asgard* to cease and desist at once, directing us in no uncertain terms to come about, retrofire, then shut down and await the arrival of a military boarding party. The predicated punishment should we fail to comply with this order was intended to be hair-raising indeed, and it did succeed in effectively raising a few hairs. Neither Paul nor Steve bothered to acknowledge any of the transmissions.

Then I suppose the opposition experienced a moment of pure joy, for *Asgard* actually did precisely as directed, when Steve rotated us prow to stern about the ship’s yaw axis, and

retrofired to decelerate. The VIEW FORWARD display at the conn showed half-illuminated Galileo and its co-orbiting modules, as well as our old bus, undocked and also co-orbiting a few hundred meters from the observatory. Looking like a chubby, delta-winged firefly, the aging bus swelled rapidly as *Asgard* maneuvered to match orbital vector and velocity.

Paul hit the intercom switch. “Work party, on your toes! Transfer coming up in six or eight minutes. Everything ready down there, all set to go EVA?”

“Ready!” A half-dozen men in vacuum gear were standing by to haul in the passengers and extra slugs of lithium fuel-source Sir John had assured us were secreted aboard the bus.

“Make it march,” urged Paul. “Let us know the instant you’ve finished lashing down the lithium containers wherever there’s deck space, and all’s secured, the passengers strapped-in.”

“Can do. Give a shout when we come alongside.”

“I’ll keep you updated,” replied Steve. “Stand by, guys.”

Concentrating every finely tuned nerve ending in his head and fingers, Steve jockeyed *Asgard*’s deadweight metric tonnes into position a short spit from the now co-orbiting bus. Buckled into the astrogator’s couch, I watched and admired his virtuosity. After a final nudge, our pirated vessel was dead in space relative to the drifting bus. I unstrapped and flew to the main airlock.

With *Asgard* co-orbiting nose-first within umbilical tube distance of the bus, a pair of “cops” in vacuum gear jetted across and rigged the tube. Changing passengers between vessels in freefall is no joking matter. Ultra-precision piloting is required, without which no one would dare it even in a dire emergency; should the ships drift apart and rupture the umbilical tube, the best any transferees inside could look forward to would be explosive decompression, instantly ruptured innards and an excellent chance of drowning in their own blood just as they were being asphyxiated. The danger is authentic, awesomely real; it makes wearing vacuum gear during such a transfer absolutely mandatory, except in *our* dire emergency. Luckily, we were blessed with a vital condition: ultra-precision piloting, yet rightfully scared by the need for haste.

Sir John himself had opted for the timesaving gamble, betting on Steve’s proficiency — an excellent, odds-on wager all things considered. The nine fellow conspirators bent on aiding and abetting space piracy who impatiently awaiting pickup zipped through the umbilical tube in groups of three. Casey led a pair of engineers making up the first trio. After edging through the hatchway, he tugged his way into the big ship, ignored all amenities and demanded to be shown where the n-space electronic gear was stowed. I couldn’t help admiring his single-mindedness. Casey will always be Casey! “The crates, cabling and matrix module are already secured in a midships hold,” I told him, “buried under a couple of dozen other cargo pallets.”

“Show me, Roger.”

Nobotts left the conn and came into the airlock service compartment accompanied by a pair of bogus, green-uniformed UN “cops” with the fuming, prepared-to-do-murder Captain Leutemann in tow. I related Casey’s eagerness to get to work, but Paul’s response was sharply negative. He told the physicist he would have to wait until we were under acceleration.

“Every second count,” objected Casey. “Need all of them.”

“Impossible.” Paul was firm. “We’ll soon be under two-plus gees of boost. If you’re able to work under that load, fine; I won’t try to stop you. But at burn initiation I want you strapped-

in like the rest of us. That's an order. Re-injure that leg, or your collarbone, or suffer some other hurt, and we'd be forced to surrender by default."

Chew's glum acquiescent nod did nothing to convince me he wholly agreed.

The next trio to come across consisted of Henry Ogilvie and a pair of technicians, all three bug-eyed after an unprotected swim through the umbilical tube. Rolling his eyes, Henry said with feeling, "Gawdalmighty, Rog! Some scary boarding jaunt, that was!" In Henry's arms was Wellington, the arrogant tomcat whose normal abode was aboard Paul's ship. Steve and Wellington have a peculiar friendship; he invariably calls the cat "a ball-bearing mouse trap."

The airlock hatch cycled open again. Alexis flew into my embrace without a word.

I said, "What's a nice rich girl like you doing in a place like this?"

"Oh, Roger! I'm so excited, so *terribly* excited!"

Next Sir John helped fluttering Dame Margaret aboard, and clasped Paul's outstretched hand in both of his. "Damn fine show, Nobbots! A hearty well done, and every millimeter of the well deserved praise you've earned. You did it! You pulled it off!"

Pleased to see everyone on our team safely aboard, Paul took Captain Leutemann's arm. "You'll have to stay in the bus, sir," and urged him to hurry back through the tube.

The captain took a tighter hold on the freefall safety line, aborting his departure. "I've no wish to court suicide," he said bitterly. "You will provide me with a pressure-suit."

"Sorry, we have neither a suit nor a single instant to waste, Captain. Go to the bus, and stay aboard until the staff heads homeward and drops you off in E-L. Go, Captain!"

"I shall remain with my ship," the four-striper said defiantly. "I ache to see them arrest you." Icy fury was reflected in the middle-aged man's piercing gaze, and grating voice.

"Sir, you have bare seconds to disappear into the umbilical tube," said Paul. "Choose to stay aboard, and you're welcome to accompany us to the Centaurus System."

"Cent . . !" His features livid, the captain cried, "Raving lunatics!" Whipping himself around, his glare laden with unleavened hatred, he cried, "We shall meet again, and when we do it will be my pleasure to see you all . . ."

Paul It was no surprise to see Paul shove the captain roughly. The closing airlock hatch cut off whatever dire threat he might have had in mind.

We hustled up to the conning bridge, to find Steve grinning crookedly. "Shipmates, talk about a hornet's nest! Give an ear to the mess of pottage coming our way. The U.N. brass is running in circles, flapping its wings, mad as hell 'cause we caught 'em with their pants at half-mast. Now the guessing game kicks off in earnest." He grinned at me and Das. "Roger, sure hope you and your terrorist buddy knew what you were doing when you ginned up the trajectory I'm about to lay on this king-sized packet we've swiped."

In the act of unwinding the rag from his head, the Raja chuckled. "Do your piloting, Pilot, and let us worry about evasive trajectories."

While anxiously waiting for the umbilical tube to be unshipped, we learned that the rendezvous with the bus had given away our identities. Now aware that we were the very same gaggle of lunatics responsible for the D-E-M-E-T-E-R "hoax," transmissions from Earth-Luna Station and the lunar U.N. Military Command Center underwent a radical change. Every bombastic squawk from the conning bridge speakers included directives aimed specifically at Alexis and every other blackballed space pirate whose name had been gleaned from the roster of

former Sinus Iridum asylum inmates. We were ordered to keep *Asgard* right where it was, co-orbiting with Galileo, until a military vessel matched orbits and intercepted our stolen ship. A second commandment doubled Steve's merriment. One less than obvious irony associated with spacecraft pursuit involves comparative vectors and velocities. At that instant, more than one U.N. cruiser was probably in relative proximity to *Asgard*, but even so it would have been next to impossible for the U.N. to use such a nearby ship to chase us down. By the time a likely interceptor decelerated and boosted on a changed vector, *Asgard* would hopefully be long gone on an indeterminate vector.

Hopefully indeterminate, that is.

The U.N. brain trust was therefore backed into a corner, making it necessary for their wise men to make the anticipatory chess moves. Aside from the Earth-Luna System, the most logical destinations for a fleeing vessel were Mars, any of Jupiter's innumerable satellites, or possibly some worldlet in the asteroid belt — Ceres, for example. It was in this arena that Das and I hoped to baffle the opposition and win the guessing game by devising a cometary ballistic trajectory designed to reinforce the notion that the Jovian satellites were indeed the destination of *Asgard*, chosen because a cometary maneuver would pile on fearsome velocity, and hopefully the U.N. brass would dispatch one or more ships on a course designed to intercept a vehicle on such a trajectory.

Hopefully deceive them, that is.

Alexis stretched a dainty hand from her acceleration couch to mine. "We did it, darling."

"Uh-huh, so far. And so far we've been *very* lucky."

"Long ago," she said, "I learned what is known as luck can only be obtained in direct proportion to adequate planning and preparation."

"Fine," I insisted, "except with or without all that we're still pretty damn lucky."

"Oh, Roger! I'm so thrilled, so incredibly elated I can hardly contain myself."

"Acceleration in twenty seconds," sang Steve over the intercom.

Paul had assisted him in completing the partial checklist. The lithium fuel slugs had been secured, and all personnel were strapped into acceleration couches in one stateroom or another, or here on the conning deck, or in the adjacent astrogator's compartment. A soft beeping emanated from the intercom, warning of the countdown to imminent boost.

"And nine," called Steve, "thousand and eight, thousand and seven . . ."

Adrenaline poured into my bloodstream in a freshet. I had lived through pre-launch excitement a number of times in the past, but like death and taxes the tension is not simply endemic, it's all-encompassing, universal.

"Thousand and five, thousand and four . . ."

Alexis smiled and gave me back my hand. I blew her a kiss, tucked my arm alongside the rest of my quivering self, and waited.

"Thousand and two, thousand and one . . . Ignition!"

Accompanied by a low-pitched rumble, GER *Asgard* burned at an acceleration of two gravities toward the nearest star.

Our very own star, Sol.

Twenty-seven - Stern Chase

The short-lived euphoria reigning aboard *Asgard* died a sudden death. The Senior Space Marshals commanding the U.N. Military Arm cannot by any stretch of the imagination be considered dullards. I would love to have been a fly on the wall able to overhear the heated discussions that certainly must have taken place. Failing that, it was a relatively simple matter to reconstruct the nature of skull sessions aimed at shooting down our one and only chance of making a clean FTL break for interstellar vacuum. Aided by rapid computer analysis of *Asgard's* trajectory, their reasoning probably went something like this:

Given: a fanatic collection of ex-asylum inmates convinced of their capability to effect faster-than-light transit to the stellar system nearest our own has yet again perpetrated a hoax by hijacking an exceptionally large, ultra-expensive, privately owned fusion torch vessel which at present is vectoring toward a solar gravity well maneuver designed to slingshot it into high velocity transit for either of two favorably positioned objectives, the asteroid belt, or the trans-Jovian satellites, *or* in the worst case imaginable are sufficiently crazed to shape trajectory toward their avowed destination, the main sequence star, Rigil Kentaurus, brightest of the three luminaries circling the center of mass in the trinary star system.

The solution hit upon by the senior marshals was as logical as the moves of a chess master; it entailed ordering pursuit designed to cover all bets, no matter how farfetched or demented the perpetrators might prove to be, by dispatching interceptors to accommodate all eventual destinations.

In any event, their decision put us at a sharp disadvantage. Military cruisers are able to pack their personnel in hydraulic suspension, and then boost at up to ten gees for a specific number of minutes or hours, while we were stuck with a lousy two or three gees of acceleration — four at most, although protracted acceleration under four gravities would stretch civilian crew safety requirements beyond the envelope recommended by space medicine. Nor would a military commander sweat over his fuel reserves, knowing that his ship could be relieved and resupplied at leisure after *Asgard* had been recovered or destroyed.

Casey was our sole hope of escaping from the multiple-pronged U.N. snare being set up. If he could manage to wed his n-space gear to the ship's power system, and be granted sufficient time left over to thoroughly wring it out, we'd be home free.

If not, well . . .

We knew nothing of a third interceptor during *Asgard's* approach to the Sun's limb. Steve guesstimated that all three U.N. pursuers were communicating with the lunar command center via encrypted line-of-sight lasercomm transmissions. Even if we'd been able to decrypt, at the time *Asgard* was approaching a point too close to Sol, and one helluva long way from line-of-sight, to intercept commonly used laser frequencies.

The Raja and I spent hectic hours at the computer, working our butts off to calculate the optimum burn sequence we would input the ship's master computer. Ideally *Asgard* wanted to accelerate under more three gees-plus at the precise instant it attained the highest kinetic energy point at perihelion, when closest as was safely possible to the sun's limb. Our moment of truth would come as Sol's awesome gravity whipped us over the solar north pole, around in cometary-semi-orbit and in a nadir vector relative to the plane of the Ecliptic.

The Raja and I each crunched numbers. We made computer run after computer run, comparing the results on each, then checked, re-checked and cross-checked the numbers before actually programming the computer to achieve optimum trial simulations of the commands we intended to input via the ship's fail-safe timing system, plus backup redundant control circuitry linked to the helmsman's console manned by Steve.

Midway through the following shipboard watch, radiation levels began to rise at a drastic rate. Everyone except the pilot and Nobotts took refuge in the "Hole," a triply-shielded cubicle at the ship's core, normally a potential haven from sudden, unanticipated solar flares. Eighteen of us crammed ourselves into The Hole, a small radiation-shielded compartment, which sounds a bit worse than it should due to being in freefall. But when triple-weight came to sit on our chests for a matter of hours I knew it was going to be pure hell. Wearing special, shielded suits, Paul and Steve stayed outside the The Hole, the pilot at the conn backing up the automatic control sequence, and Nobotts to stay in command, and to bring us meals and other essentials.

Steve gave the ship a nudge of angular momentum, producing a slow, continuous roll about the long axis designed to help evenly distribute the solar furnace's intense thermal bath over the entire hull. The ship's air conditioning heat exchangers labored, yet with not merely one but two prime power sources aboard our environment remained literally "no sweat."

The first hours in The Hole went by in fairly routine fashion. The Raja and I slept the sleep of exhaustion, while Casey fretted over the interruption of his feverish labors to install and interconnect the matrix module and the ancillary black boxes. Earlier he'd made huge a fuss, insisting that he had to continue working in a radiation protective suit. Paul nixed the proposal, pleading for Alexis' help in convincing Casey that doing as he wished would unnecessarily risk radiation exposure. Later, we wished she and Paul had not been quite so adamant.

Sir John woke Jeff and me when Steve got on the P.A. system and alerted all aboard that his countdown was starting. Pneumatic mattresses had been rigged along the Hole's aft bulkhead. We strapped ourselves in, waited anxiously for the coming crunch; standing up to four gees for one hundred and twenty seven minutes is no laughing matter. Steve's countdown ceased, and we all instantly felt almost four times our normal weight crushing us into the pneumatic mattresses. Margaret Mattingly had far the worst time of it. She groaned, complained of breathing difficulty and eventually lost consciousness. Absolutely beside himself, Sir John nevertheless knew relief was impossible for her until the torch coughed, died and microgravity once again reigned. He stayed with his wife, continuously checking her breathing.

Time dilated, stretching out in the wrong direction during that miserable period, when each minute laboring under four-gees of boost seemed to drag on interminably. I found myself praying for a return to near weightlessness, and eventually the prayer was answered. Paul brought us a meal no one felt able to eat in the wake of the ordeal. He and Sir John helped revive Dame Margaret with a bottle of oxygen. A secondary virtue of our extreme velocity after swinging around old Sol was that it knocked us quickly away from the primary radiation zone.

In the wake of *Brennschluss* and a return of microgravity, we gratefully left the Hole after radiation levels fell at mid-watch the following subjective "day," and immediately learned the bad, bad news. The Raja and I, preparing to go back to work, were on the conning bridge taking refined theodolite sightings of Rigil Kentaurus from which to derive and confirm our first midcourse correction, when the pilot popped a fist into his open palm and cried, "Damn it!"

“Now what?” inquired Jeff.

Steve snatched off his headphones, racked them to a sticky Velcro strip above the communications console. “Sorry, troops. Really thought for sure we’d bollixed the U.N. Space Marshals, but no way did we snooker those heavy-duty thinkers. A first line cruiser, UNSC *Corregidor*, is burning a hole in space, no doubt heading for an asteroid or Jovian satellite intercept. I just picked up a faint UHF transmission in the clear between *Corregidor* and lunar U.N. Spacecraft Command.”

When told, Paul only nodded, but made no effort to hide his crestfallen expression. The Raja and I exchanged glances, and he shrugged, but it was easy to see he shared my the sinking feeling. “We’d best tell Casey straightaway,” Jeff said. “Maybe he can find a way to jury-rig the system, let us scoot safely into deep space.”

Nobotts welcomed the suggestion. “Good thinking! Will you pop down to the power compartment and alert him, Jeff? Only warn Casey; let’s not panic the others just yet.” He consulted the ship’s master chronometer readout. “How many hours,” he asked me, “till the midcourse correction you two calculated?”

“Any time prior to n-space transition,” I told him.

On his way out of the conning bridge to give Casey the bad tidings, Jeff grabbed the freefall safety line to arrest his flight, and looked back over his shoulder. “It’s only a short, twelve-second burn, Paul.”

“Very good,” Nobotts told him. “If you happen to see Alexis, ask her to come up to the bridge. We have to evolve a believable strategy.”

Steve said, “Strategy, Skipper . . . ?”

“Some fairy tale we’ll need to stall *Corregidor*.”

Steve snorted. “You’ll play hell trying to snow a U.N. spacecraft commander.”

“Will it hurt to try?”

“Er, no; s’pose not. Go for it!”

Alexis pulled herself along a freefall safety line into the bridge deck minutes later. After listening to Paul’s recital of the development, she said with a long face, “Psychologically, it puts us at a perfectly awful disadvantage.”

“Velocity,” I said.

“Exactly, Roger. The titanic delta vee tacked during our swing around Sol will take *Asgard* beyond hope of retrieval in a relatively short span of hours. The U.N. captain will surely try and talk us into retrofiring, but should we fail to heed the directive he will not hesitate for an instant to destroy this ship.”

“Destroy *Asgard*?” Nobotts frowned.

“A virtual certainty. Think about it, Paul. Our peers universally view starflight as an out and out absurdity. Regardless of whatever we choose to say or do, once the U.N. masterminds convince themselves this vessel all all aboard are about to be lost in deep space, they’ll decide it the only humane thing available that will limit our . . . suffering.”

The pilot’s laugh was a short bark. “No argument, there, Alexis. Our chances of outrunning a *Corregidor* class packet in normal space is one helluva lot less than zero. The U.N. skipper can boost at nine gees — eleven for short sprints in a pinch — with his crew in hydraulic suspension. Besides, every intrinsic kps we tack on now has to be killed via deceleration at the

Centaurus end soon's we leave n-space and reenter the normal continuum. Besides, no ship has enough kick to add much more than the beaucoup velocity we've attained in the here and now, and then successfully decelerate four-plus light-years away. There's *no* practical or for that matter *possible* way to outrun *Corregidor*."

"Agreed." Nobotts had been lost in silent thought. "That we can accept that as a given." He glanced at the master chronometer's digital readout. "Roger, assuming the U.N. ship streaking to intercept us departed the E-L vicinity not long after we did, can you come up with a rough estimate of how many hours we have until such an intercept?"

I began a complicated guesstimate, grabbing numbers out of the air, making a few gross assumptions, and came up with a rough-order-of-magnitude solution based partly on an intuitive feel for the relative positions of the two ships. "A tentative ROM guess is eleven hours, give or take.

"Uh-uh," denied Steve, wagging his head. "Not bad, forget it, especially give or take. Your estimate won't hold water for another reason, Rog. *Corregidor*'s driver won't actually have to rendezvous, and he damn well knows it. Judging from Alexis' script, he'll yell at us on every comm band for a while soon as he comes in range, then decide for himself we're heading for a long, slow finish out there in the great dark between stars. Soon as he reaches that conclusion, he'll request permission from HQ to loose one or two nuke-tipped pigeons. *Corregidor* will give one last yell for us to retrofire, then loose the birds to put us out of our misery, and *then* forget all about *Asgard*."

"Can't we take any evasive action at all?" asked Alexis.

Steve wore a pained expression. "*Evade* one or more ferrite-seeker warheads? Not hardly. That U.N. packet can boost at eleven gees just long enough to launch a pair of birds banging away at twenty-five or thirty gees, and the velocities are additive. We'd have about as much chance as a sparrow evading a hungry hawk, which is . . . none!"

"It would appear," said Alexis after an interlude of gloomy silence, "our options have dwindled fast and furiously to one only. We can either surrender and face the music, or pray to God Casey finishes his hook-up in time."

"Give up?" The pilot's scowl furnished ample evidence what he thought of that notion. "Spend the rest of my days inside looking out? No thankee, ma'am. Rather be shot down in flames than knuckle-under to the U.N. wisenheimers and hold out my wrists to be cuffed."

* * *

The increasingly nervous hours wore on. Alexis and I did the sensible thing after a while, and tried to get some sleep. Awake again, we hung out in the astrogator's compartment, chewed our fingernails, counted the minutes and managed to stay away from Casey and his concentrated effort by sheer force of will. The last thing Chew wanted or needed during that crucial period was a parade of gawkers looking over his shoulder, jogging his elbow, asking asinine questions like, "How's it coming along?" *Asgard* would be ready to streak away in n-space when Casey gave the word, not until then.

Unable to stay quietly in one place, Alexis and I hung out within earshot of Steve at the conn, saying little. We dozed from time to time, flaked out side-by-side in acceleration couches. Later Henry brought us sandwiches and squeezetubes of hot broth from the galley.

Between times, Paul and Alexis put their heads together and discussed the strategy they hoped to use trying to stall *Corregidor's* commanding officer. As yet, there had been no imaging radar sighting of the U.N. Interceptor, still far beyond range of backscatter return. But Nobotts had intercepted numerous transmissions during the past six or more hours, several encrypted but one or two in the clear. Under then-present circumstances the U.N. military command was worrying not at all about talking in the clear, and eventually stopped bothering to encrypt any transmissions. The carefree attitude they displayed added to the realization of how utterly helpless we were to avoid the impending intercept.

My guesstimate jibed fairly closely with Steve's, who had insisted on repeating his admonition that a rendezvous would not be necessary. Ten hours and seventeen minutes after Steve discovered the third element of pursuit, the communications console gave forth a clear chime, indicating a carrier wave had banged *Asgard's* parabolic wideband horn, then the bridge speakers hissed faint static.

"Drawing closer," warned the pilot. He studied the comm panel's signal strength meter. "I do believe the U.N. skipper will have a strong urge to palaver, but that won't last very long. Best figure on dragging your spiel out to the limit word-wise, Alexis."

"I certainly mean to give it my very best effort." She squared herself, preparing to answer the incoming call we all expected.

The bridge speakers erupted with, "*Asgard*, United Nations Cruiser *Corregidor* here, Commodore W. S. Lavey commanding. By virtue of the authority vested in me under Special Provision Nineteen of the United Nations Military Charter, the commanded of *Asgard* is hereby ordered to cease and desist in the crime of overt piracy being committed. *Asgard* will turn ship immediately turn ship and retrofire. Should this instruction be disregarded, I have received an order to open fire at my discretion. Do not fail to respond, *Asgard*. UNSC *Corregidor*, standing by for your transmitted reply."

Although relatively close in astronomical terms, *Asgard* and *Corregidor* were still a very long yet steadily shortening distance apart. The corresponding time lag, while brief, tended to made the exchange tedious. "You're on, Alexis." Paul accompanied his words with a nod of encouragement. "Go for it! Charm the commodore's socks off!"

My One and Only bent forward to depress the comm switch, and hesitated. "Roger, will you hurry aft and check on Casey's progress. Tell him what we're facing in an offhand manner, if that's possible. Try not to unduly alarm him, but find out roughly how long we may need to prolong the stall."

"On my way." Leaving the bridge, I heard her say, "UNSC *Corregidor*, this is *Asgard*, Dr. Alexis Lemmon, Project Demeter Director speaking. What is the meaning of this outrageous ultimatum? We have committed no act of 'overt' piracy as stated in your bold accusation. We are engaged in a peaceful cruise that will be of vast benefit to humanity for untold centuries to come, and definitely do not wish to be destroyed by an act of witless misunderstanding . . ."

I found Casey curled torso-deep inside the bulky matrix module large as a small desk. Three engineers and a pair of technicians were assisting him by standing by to instantly obey his command to patch one continuity or another from his n-space electronic units into to the ship's electrical system. My heart fluttered upon viewing the the power compartment annex mess that

looked as if it had been ravaged by twin cyclones shortly before being hit by either a force-five hurricane, or a high-order conventional explosion.

Drifting head-downward, I had to peek past the edge of the matrix module's hinged-back access cover to see what Casey was doing. Trying hard to sound unconcerned — no simple feat — I asked him how it was coming along?"

"Okay." He twisted about, looked at me with bloodshot dark eyes.

"We've been contacted by the U.N. cruiser chasing us," I told him. "Time's running out fast. Alexis needs to know how long she has to sweet-talk the cruiser, because if they decide to fire missiles —"

"Half-hour," he grunted, "to forty minutes." He turned his attention back to the task.

"Not sure we have that long. Is there a chance you could jury-rig the system?"

"No."

One thing I learned months ago is that arguing with Chew amounts to futility incarnate. I said something I hoped would sound encouraging, abandoned him to his work and tugged my way back to the bridge deck.

By then Steve had acquired a faint blip on imaging radar, and was furiously punching numbers into the computer terminal. Paul and Alexis were grimly waiting through the transmission lag for a response from our would-be interceptor. When I told them Casey needed another thirty to forty minutes, the pilot loosed a mouthful of lurid profanity.

"That the best he can do?" demanded Paul.

"You know Casey."

"We'll have one bitch kitty of a time earning that much margin," declared Steve. "That U.N. cruiser's coming up fast. If the commodore decides to launch his birds now, the plug gets pulled in fifteen or twenty minutes."

"*Asgard*, this is *Corregidor*," blared the bridge speakers. "Dr. Lemmon, we are totally sympathetic to your situation, but let me repeat in a more firm, resolute manner the order to turn ship without delay, and retrofire now, now, now!" The directive, stated twice as harshly than during the prior transmission, made Alexis wince.

"You have my pledge," continued the commodore, "as a commissioned United Nations officer to personally guarantee that everyone aboard *Asgard* will be afforded the finest medical care available. I have also been advised through official channels that *GrossEuropa Raumschiff* has agreed not to prosecute in the event that *Asgard* is successfully recovered intact, in an undamaged state.

"Also, we acquired *Asgard* on imaging radar some time ago. It pains me to inform you that, should the order to turn ship, retrofire and decelerate be unheeded within a reasonable time, my instructions, while less than wholesome, are perfectly clear. *Corregidor* will not — cannot! — hesitate to open fire. Please consider your decision with care, Dr. Lemmon. Also, please think with even greater care about the consequences of making the wrong decision. *Corregidor*, out."

Alexis waited five agonizing minutes, then gave it what I'm sure she must have considered a last try. She wheedled, cajoled and moaned about the U.N.'s lack of support for a scientific endeavor of such enormous significance and importance to humanity. She referred to the Demeter endeavor as absolutely certain to become the grandest, most glorious adventure ever to befall spacefarers. Unabashedly pleading with Commodore Lavey, she put the matter on a

person to person basis, begging him to try and imagine as a high-ranking member of the professional military what a successful round-trip trajectory to the Centaurus System would mean to solar human society as a whole. She challenged the commodore to look into his heart, to ask himself if his conscience would bear the burden of two-score innocent lives, plus the loss of a major, all but irreplaceable spacecraft.

When it came, the commodore's reply was salted with more than an undertone of sarcasm. "*Asgard*, this is *Corregidor*. Dr. Lemmon, coming from a professional scientist your statement goes light-years beyond naïveté. Please stretch your imagination, and picture the effect your most recent transmission will have on those in authority. At the admittedly high velocity, *Asgard* will approach the vicinity of the Alpha Centauri System in only several thousand years. I ask you again, plead with you if necessary, not to throw away the lives of everyone aboard due to an illness which has somehow caused you to fixate upon a truly preposterous endeavor. Once again, as I must for one final time, I order you to turn ship and retrofire now, now, now! Save yourselves, I beg you! Neither I myself, the United Nations Organization I represent, nor most certainly the owners and operators of the vessel you have hijacked, has any desire to destroy you and the vessel. None! But to my great distress, your actions and replies to all entreaties force me to dutifully commence a countdown. My astrogation officer estimates that in less than fifty real-time minutes, the enormous velocity *Asgard* tacked on during the solar cometary maneuver will soon cause it to pass beyond the point of no return and be lost in deep space. As the master of *Corregidor*, you leave me no choice but to issue a command to open fire before that eventuality been realized. I beg you to heed this, the final warning. By necessity, it must and shall be our last word. *Corregidor*, out."

"How did we do, Steve?" Wide-eyed, Alexis was breathing in gasps.

"Bought a couple minutes' grace," the pilot told her. "Could be enough to matter, but then again . . . Who's to say?"

Alexis composed herself. "Very well. Shall we unwind, perhaps have some tea? In a few minutes you can go into your act, Paul."

Be damned if my true love didn't do exactly what she had proposed! Semi-reclining in weightless ease above one of the acceleration couches, she slugged a squeezetube of tea and studied *Asgard's* master chronometer as the seconds dribbled away in slow-motion, while the tension built slowly toward monumental proportions.

When Alexis thought it was time, she nodded. Nobbots went to the communications console, cinched tight the restraint harness in the seat-rigged acceleration couch, drew back his right hand and slapped himself hard on the cheek, repeated the slap on his other cheek, and popped open the comm link. "*Corregidor*, hold your fire, *Corregidor*! My name is Nobbots, Paul Nobotts. Four of us have taken the conning bridge, but those maniacs are trying to break in. I'm sure we can save the ship if you give us a chance. *Corregidor*, do you read? For the love of God hold your fire! Come in, *Corregidor*!"

We waited anxiously through the transmission lag, noticeably shorter now.

An evil grin warped Steve's rugged features. "Helluva performance, Skipper! Didn't know you had it in you."

His head bowed in concentration, Paul did not reply.

The U.N. cruiser responded more quickly than we would have liked. “*Asgard*, this is *Corregidor*. We copy five-by-five, Nobbots. If you are as you say in control of *Asgard*’s conn, it will be mandatory for you to turn ship and retrofire with absolutely zero delay. Your excessive delta vee has taken *Asgard* quit close to the estimated point of no return. Rescue can be effected only if you turn ship instantly, and commence decelerating at as many gravities as your crew can withstand. You must do it without fail now, now, now! Swing ship and retrofire, UNSP *Corregidor*, standing by for your acknowledgment.”

Paul gave the pilot his cue. “Go, Steve! Flip us arse-end-to.”

“Aye, aye, Skipper.” Steve precessed the ship about its pitch axis until we were freefalling stern first on the identical trajectory. Locking the command and control panel, leaning backward outwardly at ease, he cracked his knuckles.

“*Corregidor*,” called Nobbots, hysteria supposedly raising his voice in pitch, “we’ve complied, we’ve complied! We’ve managed to turn ship, but no pilot or astrogator is on the conning bridge, and I’m not familiar with the controls. Can you help us? Please, Commodore, we need your *help*!”

Waiting through the steadily diminishing lag in a semi-paralysis state, I watched seconds dribble one by one from the master chronometer readout.

“*Asgard*, we see that you have indeed complied,” boomed the speakers. “I have someone here who is intimately familiar with your ship’s command and control system. Unfortunately, it would take hours to give instruction remotely to an inexperienced pilot. It will therefore be mandatory,” insisted the commodore, “for you to bring someone capable of conning *Asgard* to the conn in less than five minutes elapsed time, and retrofire. If not, I will be forced to order missiles launched. My orders are specific on that score. You people aboard *Asgard* will not be permitted to languish and die a slow, painful death in deep space. With most profound regrets, UNSC *Corregidor*, W. S. Lavey, commanding, out.”

“Sucker’s too smart to bite on that feeble hook,” the pilot said in a monotone.

Paul sighed. “Didn’t so much as nibble.”

“Be a waste of breath to bang his ear any more, Paul. We’ve heard the man’s best and final offer, his last, parting word.”

Nobbots pointed to the chronometer. “If we can squeeze out another ten minutes, it will eat up most of Casey’s time estimate. Wait exactly seven minutes, Steve, then swing back and reacquire the identical midcourse setting.”

“Right, Skipper. ”

I pulled myself over to Alexis’ acceleration couch, took her hand in mine. “Whatever comes next, I want you to know how great . . . no, make that wonderful it’s been.”

“Don’t give up quite so easily,” she admonished.

“Who’s giving up? It’s just that I . . . Well, I thought you’d want to know how I felt about, uh . . . not only you, but Demeter, everything.”

“Dear Roger! Kiss me.”

I didn’t need to hear that a second time.

At the seven minute hack, Steve precessed the ship back to our original heading, and I watched him do it with no small degree of admiration. The pilot can become a wild man in one finger snap, but he’s also a true virtuoso as a spacecraft driver. Raising his head from the

theodolite's hood, he said, "Locked in tight, Skipper," and then stiffened. "Uh-oh! Reading two secondary blips, now! Damned U.N. packet's loosed a pair of pigeons."

"How long do we have?" demanded Paul.

"The balloon goes up in, uh . . . I make it six minutes and . . . couple of seconds, give or take. Best tell Casey to get a hustle on."

Alexis stabbed an intercom switch. "Casey, we're under attack. Unless we disappear in less than six minutes it will all be over."

The intercom remained silent for ominous seconds. Then Chew's placid voice came over the bridge speakers. "Plenty time. Ready in . . . Give me eighty seconds. Stand by for hack, Steve. One gee n-space acceleration for eighteen-point-six-oh-three hours."

"Gotcha, Case!" The pilot loosed a Rebel yell that would've rattled the windowpanes if there had been any. He slapped the acceleration warning actuator, and a klaxon's angry, low-pitched honk began to rattle the silence throughout the ship.

Being the uniquely carefree, yet precise-minded individual he is, Steve jubilantly punched up the comm channel we'd been using, and called, "UNSC *Corregidor*; Starship *Asgard* here, P. R. Nobbots, commanding. Per the flight plan we purposely neglected to file, *Asgard* is now departing for the Centaurus System. Strongly advise *Corregidor* not to attempt pursuit."

A chorus of laughter tainted with an undertone of hysteria erupted on the conning deck.

We were still bubbling laughter and shouting at each other when a pair of nuke-tipped missiles shot harmlessly through the starshot vacuum where *Asgard* had been minutes earlier when Casey had called "Go, Steve!" and *Asgard's* torch coughed once, rumbled into steady thunder, and the star images in the VIEW FORWARD holotank display had grown fuzzy little tails that squirmed in sort of a repulsive way, and everyone aboard had been momentarily upset by the flip-flop queasiness of n-space transition.

At a constant one gee of n-space acceleration, GER *Asgard* arrowed at a faster-than-light velocity impossible to measure accurately toward far Centaurus.

Epilogue

Instead of wildly celebrating our feat of dodging nuclear missiles in a razor-thin close call with annihilation, the abrupt cessation of tension triggered a sag that caused all hands aboard to fall into a form of semi-coma. After weeks of furious activity during which we had driven ourselves without mercy, striving to outfox and outmaneuver some very astute people, all of us had been grabbing a bite to eat on the run, sleeping in catch-as-catch-can fashion, and working very hard to deplete everyone's reservoir of nervous energy.

Under one-gee of n-space boost, with *Asgard* streaking toward the star system most proximate to Sol at at some unknown, thoroughly unbelievable multiple of photon velocity, I myself staggered aft against the force imposed by acceleration, entered the compartment I shared with Alexis — a first-class accommodation some well-heeled passenger had doubtless paid through the nose to use, crashed fully clothed, hooked the restraint webbing over my done-in bod from force of habit, and did a very fast fade.

Reviving nine subjective hours later, I yawned, feeling ravenous and a bit groggy from too much sleep. Across the deluxe compartment, Alexis's bunk was unfolded, but she herself was

gone. I showered, shaved, pulled on a fresh jumpsuit and headed for *Asgard's* dining salon to scrounge breakfast, half-expecting to find my beloved there. She was nowhere to be seen.

The microwave oven pinged, letting me know my freeze-dried ham and eggs had been adequately nuked. I was about to set the steaming tray on the table when Henry Ogilvie popped into the refectory compartment hatchway.

"Glad I found you, Rog. You're wanted on the bridge."

"All in good time, Henry. Whatever it is has to wait for me to choke down coffee and something to eat."

"Uh-uh, now, Rog!" he insisted in an un-Henrylike manner. "She, uh . . . Miss Lemmon told me to collect you fast and . . . She wants you t'come now, not later."

"What's the burning rush?" I admired the odor rising from the tray of ham and eggs. "We have eleven or more subjective weeks to contemplate our navels and twiddle our thumbs. I can't think of anything that needs doing right this minute, so —"

"You could be right," he said, "but maybe not. They think we may be havin' company."

"*What?*" I nearly dropped the tray of ham and eggs. "Why the hell didn't you *say* so?"

"They aren't . . . They're not real sure one way or the other, Rog."

I slammed down my uneaten breakfast, legged it to the conning bridge on the double. Henry had spoken truthfully; they were not sure anything tangible was even out there. *Asgard's* external sensors were transducing the same faulty, unreadable n-space gibberish we'd seen during the defunct starship's shakedown flight.

Looking understandably edgy, Sir John was huddled with Paul, Alexis and the Raja. Behind them, reclining on the helmsman's couch, Steve said, "Come and see the goofy blip, Rog. Could be anything, could be nothing at all."

Looking worried, Sir John announced that an odd, spurious return had been picked up.

"Something's definitely out there," said Alexis. "What do you think, Roger?"

Gazing into the imaging radar tank was like peering into a featureless well speckled with microflashes produced by random electron scatter. A weird splotch formed in the upper segment of the holotank — a crawling, indistinct mirage that refused to hold still, then grew tentacles and elongated, then shattered into a streaked blobs that quivered like aspic.

"Pacing us, whatever the hell it is," said Steve.

Hollow-voiced, Nobotts said, "We'd be wise to prepare for the worst."

The pilot snorted indignantly. "Maybe the *worst* of worse. If it's that liverish sumbitch, how do we prep for the 'worst' it dishes out? We tried laser fire, and it didn't turn a hair, if it has any hair. Didn't do diddly-squat, didn't so much as *singe* the bastard or its friends."

"We can't be sure it's Stinky," I said, dry-mouthed just from thinking it *might* be.

"Nor is there a way to tell it isn't," was the pilot's tart rejoinder. "Stand by to get dynamited, boys 'n girls. I feel it in my bones. Worst on worst of all is that there isn't one damn thing we can do about stopping Stinky from whatever *it* damn well wants to make happen."

Alexis gnawed her underlip. "After driving some of us insane, blowing our cover story, smashing our hopes with a medium-sized mountain dropped from the sky, and showing us off to a grab-bag of otherworldly whatevers. My God, what could be next!"

Steve's shrug was noncommittal. He unlimbered his hand laser, checked the charge level.

"Let's not jump to conclusions," recommended Nobotts. "It could be Llogaar."

Miracles occasionally do occur, and it was Llogaar.

One instant the slender, treetop-tall alien was not there, the next he instantly loomed above the conning deck, those wide-spaced feline eyes glowing with intelligence, a shimmering amethyst robe lending him the aspect of a biblical prophet. Something distantly resembling a smile was dimpling the corners of Llogaar's overlarge mouth, and a wide, rectangular package of some kind was tucked under one long, sinewy, hairless arm.

Frozen in place like a statuary group, we stared wordlessly at Llogaar until the pilot broke the spell, crying, "Whoo-o-oie! Are we ever glad to see you," and let his head fall back against the acceleration couch headrest.

How very kind of you, young sir. We assuredly reciprocate in full. While anything but commonplace, the monotonal telepathic "voice" in my head had a familiar ring, like hearing a trusted acquaintance speak.

How delightful, continued the "voice." *The degree of perseverance you have amply demonstrated is remarkable. Sincere congratulations are in order. Your resourcefulness and dedication are amazing. It is incredible to imagine how the sequence of positive and negative events has shaped this triumphant resolution.*

Ever the pragmatist, Steve said, "Where's Stinky?"

That particular unit you shall never again encounter. Having concluded all the activities detrimental to your efforts, it has returned to its rightful place of existence and suffered chastisement by . . . Let us say the authorities intervened, and leave it at that. But 'Stinky,' as you refer to that unit, is not the sort known to bear a grudge, hence you have naught to fear.

"It does not bear a grudge," said Alexis indignantly. "Well, noble of it! We certainly do, and should. We are the injured parties, not that . . . that thing."

Your summation cannot be argued, Dr. Lemmon. Yet may I advise you how exceptionally wrong it would be to sustain lasting rancor toward the peer group of which your nemesis is but a single, minuscule part. It is far from being a unique individual, but rather . . . The unit referring to itself as 'This One' is one member of a colony made up of a vast multitude. It was summarily inactivated as exemplary punishment for its flagrant, unconscionable actions, a price it not only expected to pay, but sought eagerly to pay in order to seek what it and certain others considered betterment for the collective societal status of its overall, er . . . hive comes closest.

"Status . . ." Sir John went through his throat-clearing preamble. "I say, your explanation, if that is what was intended, only adds to our confusion. Mightn't you expand on that just a tad?"

Llogaar paused as if to evaluate Sir John's suggestion. *Yes, that may be permissible now that you are beyond contact with your nucleus society. A power struggle is taking shape among numerous civilizations far beyond the galactic region you refer to as the Gould Belt. Earlier, the unanticipated research vehicle dispatched by your kind created a stir of interest among scholars whose lifeworks include cataloging and monitoring the progress of emergent species, if you will kindly permit my use of that classification. Coincidentally, and purely by chance as well, a peer group dispatched several units identical to the classification of 'This One,' with whom you have become all too familiar, as well as several members of cultures instructed to do no more than perform direct surveillance of your native spheres of existence precisely when the one you know as Llogaar was also directed to visit you in an official capacity.*

"By power struggle," asked the Raja, "do you mean interstellar war, armed conflict?"

Oh, no; nothing so drastic. Self-destructive practices of that nature are all but unknown. The root causes of the mentioned power struggle are quite complex, motivated by precepts you would find difficult if not impossible to understand, and driven by a rationale you definitely would find it impossible to comprehend, since such societies exist on a scale so vast that naught would be gained by attempting a description. Suffice it to say the objective that drove 'This One' to sacrifice itself was to successfully inhibit your culture's imminent franchise. In essence, it wished to prohibit your kind from qualifying as participants in the self-governing assemblage of intelligences to which many, many others, including 'This One's' myriad species, subscribe.

"Our . . . vote?" Every bit as bewildered as the rest of us, Alexis said, "Are you suggesting we may qualify for inclusion in this . . . assemblage merely by reaching our destination?"

It is as basic as that, Dr. Lemmon. Developing and implementing the advancement in scientific reasoning and technology needed to journey between star systems is a singularly prominent milestone in the growth cycle of every maturing culture.

"Does that mean our troubles are largely behind us?"

The towering alien's telepathic "voice" was silent for seconds. When it came, Llogaar's reply sounded pensive. *I fear it is impossible to fully endorse that interpretation, Dr. Lemmon. Perhaps your travail has merely begun, and perhaps not. The conclusion is indeterminate, and will remain so for some time to come.*

After another interlude of reflective silence, Paul said, "May I ask a question about the mechanics of telepathy?"

Certainly.

"When you 'speak' to us, exactly how is it accomplished? Might we someday hope to learn to communicate on a purely mental level?"

It would be a major surprise if your kind failed to live up to that expectation, though perhaps not in the immediate future. But to answer your query directly, one must verbalize mentally in order to be 'heard' and understood. Abstractions are communicable only by advanced adepts.

"I see," said Nobotts. "Is Standard English your only . . . ? What I mean is, what made you select our most commonly used language as the, er . . . ?"

I "heard" a sequence of what sounded like a sentence in some other language.

Paul's jaw dropped. "Afrikaans!" he said, unable to hide his astonishment.

Llogaar's huge head swung toward Das. This time I "heard" one unintelligible phrase.

The Raja grinned and replied in rapid fire Bengali.

"How very remarkable!" Alexis shook her head as if to clear it. "But it's, uh . . . Simply stated, it's inconceivable for you to have learned *all* the tongues spoken by . . . our kind."

A lesser achievement than you may imagine, Dr. Lemmon. Envoys such as ourself boast several specialties, among them exotic and adolescent linguistics.

"But even so . . . Good Lord!" exclaimed Sir John. "So very many languages, separate races and cultures."

Actually, no, corrected Llogaar. You all belong to a singular, unique species, with such slight differences only an stranger might notice. The epidermal pigmentation of Mr. Nobotts, for example, is of a darker hue than that any others among you, and the bony structure underlying

his features varies from that of Dr. Das who, while shades lighter in skin tone, is also dark-eyed. Dr. Lemmon and Dr. Shore are both blue-eyed and fair-skinned, as are you, Dr. Mattingly, yet much more mature, which perhaps accounts for your ruddy complexion. Yet to an objective observer the mentioned variations are so subtle and infinitesimal as to be almost nonexistent. You are members of one species, one strain of intelligent beings.

Now I fear the moment of leavetaking is upon us. Pressing business elsewhere awaits our attention, and that mysterious, intangible force known as time refuses to suspend its passage for any of us. Parting is by nature a sadness, yet before departing it is only proper to say what an inordinate pleasure it has been to briefly come among you. To express that pleasure, we should like to tender a memento of our all too short acquaintance. I sincerely hope you will enjoy the gift as much as one enjoys giving it.

Llogaar slipped the parcel from under his arm and, for whatever reason, passed it to me. Drifting slowly backward, his last words were, *Farewell, my friends. May good fortune continue to smile on you, and all of your efforts.*

The towering alien figure flickered, vanished.

I found myself holding a long, not too heavy rectangular parcel covered in a material resembling opaque plastiwrap.

“What in the world?” Alexis touched the package tentatively. “Open it, Roger.”

Feeling like a kid on Christmas morning, I slipped a thumbnail beneath the flap; it tore easily, letting me peel away and withdraw a slab of lucid material that looked and felt like acrylic, except a good deal lighter in weight, while on and in the panel, was . . .

Magic!

At first glance I pegged it as NGC 4414 in Coma Berenices, an unbarred flocculent galaxy lacking sharply defined spiral arms . . .

But, no, wait!

It was obviously a Class Sb spiral planetary, with with two companion clusters close by, except what I held in my hands was neither a photograph, nor a model, nor a facsimile, nor . . .

What the panel contained was absolute perfection! Each individual star of billions was pricked out precisely as to luminosity and color scale, nor were any halation effects evident even near what had to be a colossal black hole at the starry whirlpool’s gas-occluded center. The slab I was holding also had inexplicable depth, giving it the illusion of going much, much deeper into the thickness of the clear material than should have been possible.

Sir John standing at my elbow, said hoarsely, “Astonishing, Shore!” He bent over the galactic whatever-it-was to make a closer inspection. “Never seen anything remotely like it!”

Nor had I. But the longer I stared into it, the more the starry whirlpool tumbled in my mind and eventually fell in place. Now totally bedazzled, I recognized the companion clusters as dead giveaways, each in exactly the right “wrong” positions relative to the spiral configuration. Something about the symmetry of the arms also struck a mnemonic chord

The truth hit me then, and hit me hard. Deep in shock, I said, “Good God!”

“What the hell is it, Rog?” Steve wanted to know.

“The . . . Milky Way.”

Alexis gasped. “Roger, you can’t *mean* that.”

“Are you . . ? How can you be sure?” asked Nobotts.

“I’m more than just sure, I’m *positive*! The large and small Magellanic Clouds are proportionally the right size, and positioned exactly where they should be. It strongly resembles NGC 891, except that it seems larger, and has . . . the clouds. I’ve spent too many hours studying galactic nebulae not to be certain. We’re somewhere about . . . here along the Sagittarius radius,” I said, pointing numbly, “roughly thirty thousand light-years from the hub. What strikes me as most unbelievable is the *definition*, which is simply fantastic!”

Her blue eyes misted with wonder, Alexis said, “The perspective, Roger.”

“I know. I’ve been thinking about it,” I told her. “If the perspective is accurate, it may mean Llogaar is not from our galaxy.”

* * *

That pretty much wraps it up. *Asgard*, our pilfered “Home of the Gods,” is roomy and comfortable, not to mention being amply provisioned with everything we could possibly need for about the next quarter century. The shipboard routine is relaxed, casual. Our merry band of space pirates has earned its leisure a thousand times over, even if objectively we are no more than n-dimensional waveforms flashing through vacuum at a velocity greater than three hundred thousand meters per second.

Having time to spare, and then some, I’ve talked this account into a voicewriter, and stored it on multiple discs. Sometime during the next few watches Casey intends to interrupt his cerebations long enough to switch-off the n-space electronics and call a halt to our starry journey. Now a great estimated distance from the Fond and Familiar, *Asgard* will re-transition into the relativistic continuum long enough for mid-course theodolite sightings to be taken and our trajectory corrected. During the brief hiatus, a data-compressed string of digital bits and bytes consisting of my tale, plus all other pertinent technical data, will be spritzed sunward in a burst transmission. That way, should we happen to vanish forever into the depths of galactic night — perish the thought! — our peers will learn the major details pertaining to Demeter’s pioneering starflight endeavor. Our message may fall on deaf ears, may create consternation, or may cause the majority of billions of ground-pounders who bother to learn of it to shrug in perplexity and go on with their daily lives. On the other hand, we space pirates could ironically return to solar space before the straggling chain of impulses wends its weary way homeward.

Five subjective “days” ago, Alexis and I were married by “Captain” Nobotts in a most uncommon ceremony. Sir John gave the bride away, while the Raja stood up for me as best man. Dame Margaret referred to herself as a “superannuated bridesmaid” and did the honors, then wept charmingly once the ceremony had been concluded. Henry Ogilvie cried, too, but not until after singing “I Love but Thee” in a way that made Alexis and me teary-eyed as well. Even Wellington, our surly tomcat, acted a touch more polite than usual.

I love Alexis more than I can say. No matter what legions of odoriferous beasts await us in the great unknown around and no doubt far, far beyond Rigil Kentaurus, I will always love, cherish, honor, and obey her.

Oh, one last item. GER *Asgard*, huge long-haul spacecraft that it is, boasts not one but two freefall squash courts. During the first watch after we halted under microgravity to send off this message, I challenged Nobotts to do battle *mano a mano*.

Just between us waveforms, I whipped his ass!