

# HERBIG-HARO

## ERIC G. IVERSON (HARRY TURTLEDOVE)

Like all the ships Loki flew. Erasmus Chang's scout *Praise of Folly* was too old. She went into or out of hyperdrive with a jolt that twisted a man's guts, her air recycler wheezed, and she had a 5% waver in her pseudogravity, so Chang's weight went through a seven-kilo cycle every twenty minutes.

The computer was old, too. In a way, that was an advantage: the navigation data programmed in were Terran Confederacy, the most far-reaching set even if it was six hundred years out of date. But after enough time, memory dumps or no, a computer will develop a personality of its own—the current flows get set. Chang did not trust his machine very far. It was as cynically underhanded as he was.

"Well, hero, they're still gaining," it said with what he thought was misplaced amusement.

"I can see that for myself, thanks," he growled. He paced up and down the cabin, a lean, trim man a bit below middle height whose wide, high-cheek-boned face was framed by a thin fringe of black beard.

Pace as he would, though, his eyes kept coming back to the hyperdrive detector. There was little enough else to see; with the drive on, none of the normal-space instruments worked. The four glowing points in the detector display were Zanat warships. One he might have challenged. Taking on four was sure suicide, and he could not afford it. Loki and all the worlds in human space needed to know about the Zanat.

Unfortunately, they would overtake him long before he could deliver the news—long before he got out of the Orion Nebula, for that matter.

He punched for a sandwich, ate it. When he looked at the FTL display again, the four warships had slid a little closer.

"I wish I'd chosen a different bar," he said.

"You aren't the only one," the computer told him.

As soon as the shavetail lieutenant had stepped into the London Pub. Chang knew his leave was doomed. The youngster was in uniform, which meant he was on duty, and Cluing was the only Service man in the dive. Just my luck, he thought sourly: run a successful mission and not get the chance to celebrate.

The load of books, cassettes, and floppies he'd snaked out of the cathedral on Cienfuegos deserved celebrating, too. Old floppies especially were more precious than gold. Even the Cienfuegos remembered that much; they'd mounted the discs above the altar, by the statues of their gods.

The scout pilot was still fuming when the lieutenant brought him back to Salvage Service Central. B'kila thought it was very funny. "Where did he find you? The London Pub or Nadia's?"

"The London Pub," Clang sighed. That his habits were known did not surprise him; he would have been surprised had it been otherwise.

B'kila looked him over, cocked a critical eyebrow. "That's not much of a beard, either."

The scout pilot put a defensive hand to his chin. He had grown the whiskers on Cienfuegos, to make himself less conspicuous there, and was proud of them. In spite of his name, he had enough caucasoid genes to let him raise a fair crop. "The day you start telling me how to wear my hair, you old harridan, is the day I get out of the Service."

B'kila laughed out loud, a bad sign; things that amused her generally meant trouble for other people. She was a plump black woman with straight, graying hair, the head of what was euphemistically known as the Loki Salvage Service. Loki's few friends called the Service a band of scavengers. Everyone else started with names like pirates, thieves, spies, and went downhill from there.

Having wasted enough time on pointless chatter, B'kila waved Clang to a chair by the big holo tank that took up most of one wall. He sat with the same feeling he had whenever he was in her office—that of being in the center of a spiderweb, watching the spider at work. Being on the same side helped only a little.

"What's gone wrong?" he asked bluntly, sure she would not have recalled him without pressing reason. Operatives got their chance to roister between missions.

She punched a button on her desk. The holo tank sprang to life with a view of that small chunk of the galaxy humans had touched. Stars with planets that were thought from any source, however ancient, to have been settled by men were shown in blue; those about which Loki actually knew something flashed on and off. Red marked the suns of nonhuman species that used the hyperdrive, yellow those of planetbound races. Most others were omitted; the white points here and there were stars with absolute magnitudes bright enough to make them useful nav checks over many light years.

She moved a veneer, touched another control. One of the winking blue points flared brighter for a moment. "Cienfuegos," she said unnecessarily. "I've listened to your report. A good run."

"Thanks," He waited. The compliment was another danger signal. Anything she had to get around to by easy stages was bound to be dicey—not for her of course. For him.

His suspicion was confirmed when four brilliant orange points sprang to life beyond the glowing mist of the Orion Nebula, which dimmed to show their location more clearly. She said, "As well as I can judge, those spots mark where we've lost ships in the past two years."

"That's impossible," Cluing blurted. "There are no human worlds out there." Loki itself was two hundred light-years Terraward from the Nebula, and hardly any blue points lay between it and the great cloud of gas.

"Impossible is not a word used to describe what's already happened." B'kila said in mild reproof, as though to a student who should do better.

"But—" Chang's protest died Unspoken. B'kila knew the obvious as well as he. Starships in hyperdrive flew blind, of course; there was always the chance of returning to normal space coincident with solid matter. It was a very long one, though. Aliens might have worked up a trick good enough to snare one ship, he thought, but hardly four, not with the technological lead humans had—and especially humans from a planet like Loki, which still kept most of the skills of the dead Confederacy. That left . . . nothing he could see.

B'kila spoke with seeming irrelevance: "Do you know 'The Road Not Taken,' a poem by a Middle English writer named Frost?"

"Never heard of it."

"You might look up a modern translation when you leave. This Frost person could have been looking a hundred years into his own future."

The galactic map disappeared from the holo tank. A scratchy flat image replaced it: a crowded city scene, with swarms of humans in strange clothes, both civilian and military, milling about at a cautious distance from a starship of a make Chang did not recognize: a pretty crude one, he thought.

"This is Tokyo—the first Roxolani landing on Terra; it might just as well be Cairo, New York, Moscow, Shanghai, or twenty others. A.D. 2039," B'kila said softly. Seeing that the archaic date meant nothing to Cluing, she added, "45 pre-Confederacy."

He whistled. No wonder the video was scratchy—it was over twelve hundred years old. He wondered how many times it had been rerecorded.

In the picture, the ship's ramp was lowering. "You can imagine the Terrans' anxiety," B'kila said dryly. "They'd been radioing the Roxolani since the fleet came out of hyperdrive in the solar system."

Chang nodded. Naturally, they had gotten no reply.

Out came the Roxolani, a platoon of stout, furry humanoids in high-crowned helmets and steel corselets. They moved with the precision of veteran troops, shaking themselves into a skirmish line. At a shouted command from an officer wearing scarlet ribbons on his arm and fancy plumes, they raised their weapons to their shoulders and fired into the Terrans.

Chang heard the ancient screams. Undoubtedly the man holding the video set ducked for his life, for the picture jerked and twisted, but the scout pilot saw the clouds of black-powder smoke float into the sky.

The Terran soldiers around the starship returned fire automatically opening up with small arms, rocket and grenade launchers, and recoilless shells from the armored fighting vehicle that had somehow squeezed into position close by.

When the video straightened, the starship was holed and all but two of the aliens down. The survivors gaped at their fallen comrades. Neither had made the slightest move to reload his musket. Reading nonhumans' body language was always tricky, but Chang knew stunned horror when he saw it.

"The Road Not Taken," B'kila murmured. "Back then, on Terra, they *knew* FTL travel was impossible forever. It was a rude shock when they found that a couple of simple experiments could have given them the key to contragrav and the hyperdrive three, four, even five centuries earlier."

"How *did* they miss them?" Chant asked.

"No idea—in hindsight they're obvious enough. What's that race that flew bronze ships because they couldn't smelt iron? And every species we know that reached what the old Terrans would have called a seventeenth-century technological level did what was needed—except us.

"But trying to explain contragrav and the hyperdrive skews an unsophisticated, developing physics out of shape. With attention focused on them, too, work on other things, like electricity and atomics, never gets started. And those have much broader applications—the others are only really good for moving things from here to there in a hurry."

With a chuckle, Chang said, "We must have seemed like angry gods when we finally got the hyperdrive and burst off Terra. Radar, radio, computers, fission and fusion—no wonder we spent the next two hundred years conquering."

"No wonder at all," B'kila agreed soberly. "But the Confederacy grew too fast and got too big to administer, even with all the technology we had. And unity didn't last forever. None of our neighbors could hurt us, but we did a fine job on ourselves. Someone back then wrote that it was only sporting for humans to fight humans; no one else gave any competition."

"And so, the Collapse," Chang said.

"And here we are, on Loki and a few ether worlds, picking over the pieces, a scrap from here, fragment from there, and one day we'll have the puzzle together again—or maybe a new shape, better than the one before . . . if we get the time. But those four missing ships frighten me."

That was a word Chang had never heard her use before. "I still don't see how they disappeared. There's no one out there."

"No one we know of," B'kila corrected. "But I keep thinking that a road traveled once might be traveled twice."

As he took her meaning, Chang felt the little hairs at the nape of his neck trying to stand up. She finished low and fierce. "Find out what happened. *And come back.*"

"Any other little favors you'd like?" *Praise of Folly's* computer had demanded when Chang described the mission. "Shall I write the suicide note, too? I won't go. I tell you—I'd end up in the scrapper there just as much as you."

"Shall I shift into override mode?" Chang snapped, in no mood for backtalk,

"No, don't," the computer said with poor grace. "It always leaves me slow and stupid for a couple of days afterwards."

Surly was a better word, the scout pilot thought, but held his peace. The takeoff was as smooth as takeoffs under contragrav always were, the shift into hyperdrive as brutal as the others *Praise of Folly* had been making lately. Chang staggered into the head and threw up. When he came out, he asked plaintively; "Isn't there any way to smooth that out?"

"Of course," the computer said. "Get me the parts and—"

Chang grunted. Loki's own yards turned out decent craft, but some techniques of precision manufacture had yet to be rediscovered. If one of the old Confederacy ships went wrong, repairs weren't likely to do much good.

Despite *Praise of Folly's* tape library, travel under hyperdrive was dull. The computer played chess at a setting that let Chang win about half the time, until one day he escaped from a trap it thought he shouldn't have seen. Then it trounced him six times running, adding insult to injury by moving the instant he took his finger off a piece. After that it seemed satisfied, and went back to a level mere mortals could match.

From time to time other ships showed on the detector. Most of them never sensed *Praise of Folly*; Confederacy instrumentation handily outranged nonhuman or post-Collapse gear. Once, though, two vessels made a chase of it. "Damned pirates," Chang growled, and outran them.

He approached his planned emergence-point obliquely, not wanting any observers to track his course back to Loki. The jolt on leaving hyperdrive was not as bad as the one entering it—quite.

"Now what?" the computer said.

The viewscreen showed a totally unfamiliar configuration of stars. Even the Orion Nebula was not as Chang knew it, for he was seeing the side opposite the one it presented to human space. He shrugged. "Make for the nearest main-sequence G or K," he said, and gagged as *Praise of Folly* returned to hyperdrive.

The first yellow-orange sun proved without habitable planets. So did the second and third. A lean region, Chang thought. He was on his way to the fourth when the detector picked up the alien squadron.

Excitement and alarm coursed through him. From the brilliance of the blips on the screen, those were sizable ships. They were making good speed, too, far better than most of the nonhuman craft he knew. He held his course and waited to be noticed.

In short order he was; the strangers had sensitive detectors. Three vessels peeled off from the main group toward him. He took no evasive action; he was looking for contact. "Fool that I am," he said to no one in particular.

The lead ship's drive field touched his; they were both thrown back into normal space. Gulping, Chang wondered whether the aliens were subject to nausea.

The two ships emerged on divergent vectors several thousand kilometers apart. That would have been enough to make it impossible for most of the aliens the scout pilot knew to find him in the vastness of space, but the stranger swiftly altered course and came after him.

"I'm picking up radar," the computer reported.

"Wonderful." Chang said morosely. As usual, B'kila had been right.

The other two ships must have slaved their engines to their detector screens, for they returned to normal space at the same instant as their comrade and *Praise of Folly*. Chang's radar soon found them. They closed rapidly.

"Radio traffic," the computer said. The whistles and growls that came out of the speaker sprang from no human throat.

"Let's give them something to think about." Chang recorded his name and the name of his ship. "Squirt that out on their frequency."

There were several seconds of absolute silence, then a burst of alien noise that sounded much more excited than the previous signals. Chang wondered if the nonhumans had learned English or Low

Mandarin From any of the earlier pilots. If so, they were not letting on. The incomprehensible babble continued.

Then alarms hooted and the computer was shouting, "Missile away!" A moment later it reported, "Contragrav job, fairly good velocity, but, a clean miss—trajectory far ahead of us."

"Just the one launch?" the scout pilot asked tensely.

"So far." *Praise of Folly* was a confirmed pessimist.

"Might be a shot across our—" A new star bloomed in the forward screen, a supernova burst that went from white through yellow and orange to red and slowly guttered out.

"Fission explosion," the computer said matter-of-factly. "Thirty kilotonne range."

Chang held his head in his hands. Not just electronics, then: the aliens had a grasp of nuclear physics, too. He could not imagine anything worse.

"It lit up these," *Praise of Folly* said. Another screen came on, its images grainy with high magnification. The scout pilot did not recognize the craft displayed, but he knew warships when he saw them. They bristled with launchers and also sported two turrets each: quick-fire guns for close-in work, he guessed.

He weighed his options. Even winning a standup fight would not give him enough information to make B'kila happy. Meekly stopping, though, stuck in his craw. "They may as well be as worried as I am," he decided. "Give the lead ship a peewee at about the same distance they put theirs—but throttle down the missile so theirs seems to outperform it." He did not intend to show all his cards.

Atomic fire blossomed again, unmistakably brilliant. The gabble of alien noise rose to a roar. Then abrupt silence fell; it must have occurred to one of the nonhumans that Chang might somehow know their language. Cat and mouse, he thought, with neither side sure which was which.

The three alien ships approached one another, though not so close that a single blast could take out more than one. Boats flitted back and forth: a meeting, no doubt. Glad he was a loner. Chang went to sleep. In case of serious attack, the computer would have to defend *Praise of Folly* anyway.

The computer woke him a couple of hours later to report that one of the aliens had gone into hyperdrive. "Which one?" he asked. The smallest of the three appeared onscreen for a moment.

A boat left one of the remaining aliens and moved slowly toward *Praise of Folly*. Unlike its parent craft, it blazed with lights: the equivalent of a flag of truce? Chang could not afford to be trusting. "If it comes inside 2000 kilometers, fire another warning shot," he said. "Chemical explosion this time, not nuclear."

But the boat stopped at more than twice that distance. It retreated to its own ship, leaving behind a small metal canister made conspicuous by a floodlight and radar beacon. "Playing it very cozy, aren't they?" Chang said.

"Probably booby-trapped."

"Probably," he agreed. "Shall we find out? Send the probe over for a look."

The little robot sped toward the canister. The scout pilot wondered what the nonhumans would make of it. It would tell them something of the technology he had, but he hoped to learn more about theirs.

The light on the canister was incandescent, not a plasma tube; the battery pack that powered it was larger than the Terran equivalent. The canister itself looked suspiciously like a wastebasket. A foil cover had been taped across the top; the paper tape was already beginning to come loose as its adhesive dried in vacuum.

At Chang's direction, the probe peeled back the foil. Nothing untoward happened. The camera pickup showed that inside the canister there were only two rectangular sheets of thick, parchment-like paper, one perfect, the other with a ragged edge, as if it had been torn from a book.

The book page had a line of incomprehensible script, but a black-and-white print took up most of the surface: an irregular pattern of lines and spaces. The scout pilot was used to seeing them in color, but he recognized it at once. "Spectrogram!" He had an inspiration. "Match it against the sun their fleet was

heading for."

After a few seconds, the computer said, "It checks." Chang fancied that he heard a note of puzzled respect in the electronic voice. He hid a smile. The computer was smarter than he was, but it did not make intuitive leaps.

The other sheet proved that the aliens were used to contacting other races. A series of skillful cartoons instructed Chang to go into hyperdrive between the two nonhuman ships and let them pace him to the star. They also warned that he would be attacked if he dropped into normal space on his own; he was to let one of the aliens bring him back by cutting across his drive field.

"Sensible enough precautions," he said. "They'll have scrambled every warship in that system to look out for me as I emerge. too. I would, in their shoes."

For *Praise of Folly*, the jump into hyperdrive was smooth. Chang's escorts hovered close, just far enough away to let their fields operate. To his regret, they kept up when he increased speed. Though the rest of their skills seemed a bit behind those of the Terrans, their hyperdrive systems were first-rate.

Shortly before he expected to return to normal space, the scout pilot gritted his teeth and injected himself with several cc's of memory-RNA. For the next ten days to two weeks he would have nearly total recall—and a raging headache.

Like Terrans, the aliens preferred to emerge well away from a system's ecliptic plane, to minimize the risk of encountering sky junk. Chang listened torpidly as radio traffic crackled back and forth between his escort and the ships that, as he had guessed, were standing by awaiting his arrival.

Several formed up in a globe around him. Another message canister showed him that he was to stay in the center of the formation as they approached the system's second planet. "If it weren't for the honor of the thing, I'd rather walk," he grumbled; reading Frost had gotten him interested in other ancient authors.

The lead ship in the escorting array slowed until it was only a couple of kilometers ahead of *Praise of Folly* and began flashing its lights on and off. After a minute or so, the scout pilot understood. "Folly, if you will."

"So it is," the computer said, but went after the alien in spite of his slip of the tongue.

Spaceports on civilized worlds have a depressing sameness; it is next to impossible to make vast expanses of concrete interesting. The perimeter buildings, though, caught Chang's eye when *Praise of Folly* dipped below the last cloudbank; they had the massive look of fortifications.

Atmospheric flyers screamed overhead as *Praise of Folly* touched down near the center of the field. Gun-carrying armored vehicles that reminded Chang of the ones he had seen in B'kila's ancient tape rumbled toward the ship.

There were also footsoldiers running across the concrete. Chang turned up the magnification on his vision screen. The aliens were fairly humanoid, taller and thinner than Terrans, with knees that bent in the opposite direction. They had narrow, foxlike faces, long jaws, and blunt carnivore teeth. Thick reddish-yellow hair covered most of their bodies; they went nude except for boots, belts with bulging pouches, and helmets.

Their hand-weapons gave the scout pilot a momentary start. The guns' curved magazines reminded him of the Kalashnikovs that were still ubiquitous in human space. He quickly saw, though, that it was only coincidence; the rest of the design was not similar at all.

He checked the atmosphere analysis. The air seemed good enough, barring some noxious oxides of nitrogen and sulfides that probably came for the noisy, smoke belching iron monsters out there. He didn't worry about diseases. Few alien germs found humans tasty, and his broad-spectrum immunity shots left him doubly safe.

After instructing the computer, he strapped on a sidearm and cycled through the airlock. The pistol

meant nothing as a weapon against the firepower out there, but no race with an organized military could fail to grasp what it represented.

The worst moment came as the outer airlock door swung open. If one of the aliens panicked or got trigger-happy, B'kila would have five missing scouts to brief the next pilot about.

Some of the aliens yelled when Chang came into sight. "Officers, it would appear," the computer said into a receiver implanted behind his ear. "Notice the stripes on their helmets." Seeing one of them knock a soldier's gun aside, Chang tentatively identified his first phrase in the alien language: "Hold your fire!"

For a moment he thought his weight was shifting, then realized it was the opposite: like a seaman rolling on land, he had become so used to *Praise of Folly's* pulsing generator that steady gravity felt odd.

After the ship's mechanically pure air, the unidentifiable spicy smells of growing things hit him like wine. He did not even mind the diesel stink mixed with them, though it made him cough.

He paced off a circle of about ten meters around *Praise of Folly*, made pushing motions to show that the troopers should keep their distance. When a squad arrogantly strode inside his perimeter, *Praise of Folly* let go with an ear-splitting siren screech. Machine guns swiveled to bear on the aliens. They scrambled back.

Chang smiled to himself. It would not hurt to have the aliens think the ship still manned. In a way, it was.

One of the nonhumans stepped out of a small group and came forward, ostentatiously stopping at the boundary line Chang had set. The scout pilot caught his musky body odor; who could say what he smelled like to the other?

The alien—an officer of some rank, by the five stripes on his helmet—pointed to himself and said, "Zan." He pointed at one of the soldiers behind him. "Zan." Another. "Zan." A wave that encompassed a dozen or more. "Zanat."

The language lesson went from there. Chang soon decided that the Zanat officer was a trained contact specialist. He went about his business with a calm competence that implied he had undertaken such tasks many times before. Skillfully he gave Chang both vocabulary and grammatical structure. The latter made the scout pilot want to groan, for the Zanat language was highly synthetic. Chang wished for the simpler analytic structure of Low Mandarin or English, but he had been on enough worlds that spoke Russian-based tongues to cope. And what he learned, he did not forget.

The contact officer's name was Liosh; that, at least, was as close as Chang could come to it. His own name sounded like "Razmuzjang" in the other's mouth. Liosh undid his belt, tugged off his boots, put his helmet on the tarmac. When completely naked, he pointed to himself, then to *Praise of Folly's* entry ladder. His mobile ears twitched in what Chang had already come to recognize as the equivalent of a raised eyebrow. "Go there?"

"No." The scout pilot could not make his refusal polite.

Liosh gave a very human shrug. He pointed to one of the blocky structures several hundred meters away. "Go there, then?"

The scout pilot decided to risk it. He has several days' worth of food concentrates in the knapsack on his back, as well as vitamins to supplement alien food and reagents to test for the more common sorts of indigestible proteins and lipids. If the Zanat intended killing him, they had easier ways than poisoning.

He spoke into his handset, telling *Praise of Folly* what he was about and adding, "If I'm lost, get the data home if you can: override command. And another override: destroy yourself to avoid capture."

"Acknowledged," the computer said sulkily, speaking, as Chang had ordered, through both the receiver behind his ear and the handset. He wanted to make sure Liosh understood what that was; the Zanat model was a back-carried unit bigger than his knapsack, and looked to be much heavier.

Liosh, he suspected, was smart enough to draw his own conclusions from that.

After several tries, he conveyed to the Zanat that hell would break loose if he was not allowed to communicate with his ship regularly, or if they tried to seize it while he was gone. Limb agreed so

promptly that Chang was sure the aliens would take their chances when the time came. He shrugged; he had known that already.

Troopers fell in around him and Liosh as they walked toward the port building. When they were nearly there, Chang heard a spatter of small-arms fire: single shots, followed by the harsh *tac-tac-tac* of automatic Weapons.

He whirled, but the gunshots had nothing to do with *Praise of Folly*. In fact, several of the armored vehicles were rumbling away from his ship toward the far edge of the spaceport. "What's going on there?" he asked the computer.

"Fighting." Sophisticated as it was, *Praise of Folly* could be annoyingly literal, especially just after an override command. A moment later, though, it added some worthwhile information: "The attackers stay well hidden, but do not seem to be Zanat."

"Interesting," Chang said. He turned to Liosh, used the only interrogative he had. "What?"

The contact officer spread his four-fingered hands in a gesture many races used. "Slayor," he said. "People of the world." He approached that several ways, until he saw that Chang understood. He did not have a high opinion of the Slayor. Pointing at a starship:

"Slayor—no." At a fighting vehicle: "Slayor—no."

Local barbarians, the scout pilot translated mentally. Which meant that this was not the Zanat homeworld. He had not really thought it was, but the implications jarred him all the same. The Zanat were plainly here as conquerors, not traders—which argued for an expansive, unified imperialism such as the dead Confederacy had known.

And if they found fragmented humanity unprepared . . . Their technology was not up to the best Terran standards, but not much in human space was either, any more. Chang wanted to run and hide.

Instead he followed Liosh into the port building. The door closed behind them with a thud that told of metal reinforcement. Liosh led him up a couple of flights of stairs and through a tangled set of corridors to a suite of rooms from which troopers were hauling desks, cabinets, and other office furniture. Others were standing by with gear that looked as though it had come from their barracks: a big metal footlocker, a table, a cot amazingly like Loki standard issue, and several peculiar free-standing contraptions that puzzled Clang until he realized they had to be what a race with back-acting knees used for chairs.

Liosh pointed at the gear and the rooms. "Yours," he said. Chang nodded, a gesture with which the Zan was already familiar. The scout pilot noted that, as befit a fortress, the windows were mere firing slits. Nor was he surprised to discover a guard-squad outside his door. He had been a prisoner ever since his ship emerged in this system.

He gained fluency in the Zanat language with a speed that won Liosh's respect. The alien contact officer pushed hard; he did not have the advantage of an artificially unfailing memory, but he owned a good one, and the Zanat seemed to need only about half as much sleep as Terrans. He found Clang's dormancy amusing.

The scout pilot came to like him, not least because he did not take himself too seriously. For all that, the Zan was a clever interrogator, adept at sliding smoothly from one subject to the next. One secret, though, he did not penetrate: the scout pilot was careful always to speak of the Confederacy in the present tense. He was so perfectly consistent that Liosh never thought to doubt him.

Still, it was not an easy time. Liosh extracted a good deal of information, and yielded little in return. Chang started seeing those probing golden eyes, started hearing that guttural voice in his sleep.

He dreamed they were trying to talk during a storm. Thunder boomed; lightning seared the sky. When he woke, for a long moment he was unsure he had. The night was pitch-black, but lurid flashes of light came stabbing into his chamber. The crashes that tore the air were louder and more continuous than those from any tempest.



He heard shouts through the turmoil: the harsh yells of the Zanat and different cries, high thin wails that rose and fell in weird ululation. The wails grew ever louder and ever closer.

The Zanat had not bothered to disarm him. He belted on his pistol, dashed to the window and looked out. Carbon arc lamps on tall poles spread a hellish blue glare over the spaceport tarmac; the shadows of the figures dashing across it were black and sharp as if cut from dies. Most moved with a sinuous grace the Zanat did not possess.

A machine gun chattered from a gun pit, spitting flame. Running shapes toppled, one after another. A couple, Chang thought, were Zanat. Then the gun stopped—a jammed cartridge? A broken firing pin? The scout pilot had no way of knowing. Some of the graceful runners leaped into the pit. The machine gun stayed silent.

*Crump!* Front the great cloud of smoke that shot up, it was a black-powder explosion, primitive but effective. An arc-light support tottered, swayed, fell with a heavy boom. A moment later another lamp was taken out, and a quarter of the field plunged into twilight.

The Slayor yowled in triumph. Not all of them toted only their native arms. A burst of half a dozen bullets thudded into the wall near Chang's window. He hurriedly pulled away. That had to be a captured gun.

Another explosion was followed by the iron clang of a starship smashing against concrete. Chang's gut clenched with fear. If *Praise of Folly* went down under the locals' attack, he was marooned as inevitably as if the Zanat smote her with a nuclear warhead,

The Zanat inside the spaceport buildings had not been taken entirely by surprise. The sentries were alert, and the species as a whole was not so sunk in sleep of nights as Terrans would have been. Alarms yammered. There were shouted orders in the next room, a tinkle of glass as a window was broken out, and a rattle of rifle fire. "That got a couple of the motherless *fargs!*" a trooper shouted.

But the Slayor must have been building their attack in secret for months, maybe years. They were throwing everything they had at the hated invaders from the stars. Somehow they had even hauled one of their clumsy field-pieces to the edge of the spaceport to oppose Zanat artillery. Back at his window, Chang saw the muzzle flash and belch of smoke. A solid shot smacked into the building.

The Zanat, though, had built to withstand a lot of that kind of pounding. And when the natives tried to force the stout door through which Chang had entered, they were bloodily repulsed. The Zanat raked their retreat with fire. The scout pilot thought the assault had been wrecked.

But it was only a diversion, to draw the enemy's attention while a squad of Slayor set a charge against the far side of the port building, lit a fuse, and fled.

The blast hurled Chang from his feet. He rolled into a tight protective ball. The floor lurched beneath him. The noise was stunning, a blow at the ears.

He staggered upright, dazed, half-deafened. Faintly, as if through roaring water, he heard injured Zanat screaming. The air was thick with the smell of smoke and blood. There were other screams too, of wild excitement. The Slayor were in the building.

The door burst open. Only wan auxiliary lights burned in the hallway, but they sufficed to show Liosh and a pair of soldiers with rifles. The contact officer was limping; someone had slapped a rough bandage on his lower leg.

"Come on!" Liosh barked at the scout pilot. "We'll get you away. We may not hold here, and you're too precious to leave for the savages to butcher."

Chang agreed with that, though for reasons very different from the Zan's. Yet being taken from the neighborhood of *Praise of Folly* was the last thing he wanted. When he hesitated, one of Liosh's troopers hefted his gun menacingly. He yielded.

Liosh made no concessions to his wound as he hurried through the maze of corridors, picking his way over rubble and corpses. Chang saw his first Slayor, dead, a slim, gray, hairless being still clutching a large musket. Neat bullet holes stitched its chest; the exit wounds chewed its back to red ghastliness.

The contact officer followed his eyes. "They are fools, brave fools but fools. They do not see they

will be better off once we pacify them and bring them into our Sphere."

The Romans had sung that song in Gaul. Cluing thought, and the British in India. and the Americans in Indochina, and the Confederacy on Epsilon Eridani I. Sometimes they turned out right in the end, sometimes not. Either way, a lot of people got killed finding out.

A live native poked its head round the corner, let out a yell, and charged. It was armed only with a rapier. A burst of fire from the Zanat chopped it down.

Behind them, a gun spoke, the dull report of Slayor powder. One of the troopers with Liosh pitched forward on his face. A squeal of agony said the local had not enjoyed its victory long. Liosh knelt, asked the wounded soldier a question too low for Cluing to catch. The answer came in a choked grunt. Liosh drew a knife across the Zan's throat in a quick, practiced motion, touched the ears, eyes, and nose of the body in turn, then straightened and hurried on.

He led the remaining trooper and Chang to a door, "In here," When his companions were through, he dogged it shut behind them. "Now down, all the way." On the spiral stair his injury did trouble him. His thin, dark lips skinned back from his teeth as he forced the pace.

There were no Slayor in the sub basement, not yet. Even the auxiliary lights failed, though, as Chang emerged from the stairwell. Before he could think of escape, the two Zanat had electric torches out.

Liosh went ahead with such confidence that he hardly needed light. At last he came to the door he was seeking. "Escape tunnel," he explained to Chang, "in case of such embarrassments as this. I hope there's a vehicle left at the far end."

The passage was several hundred meters long, with only thin orange beams of light stabbing into the blackness ahead. Then the scout pilot smelled fresh air ahead, night-cool and moist. Liosh swarmed up a metal ladder. "You next," he called. Very conscious of the trooper's rifle at his back, Chang climbed.

A belt of thick, shrubby vegetation had hidden the vehicle park from the spaceport. Two or three pieces of heavy armor still sat there, squat and deadly. but most were already in the fight; their passage had flattened wide swathes of the native plant life.

Liosh ignored the behemoths, heading instead for lighter, swifter transport. A military historian would have called it an armored personnel carrier; Chang had seen similar machines on several human worlds.

The trooper scrambled into the driver's compartment. Liosh and Chang went round to the rear of the vehicle. The Contact officer turned to open its double doors—and Chang, at last unwatched for an instant, drew his pistol and sapped the Zan behind the right ear.

Liosh fell bonelessly. The scout pilot raced back to the trooper, who was cursing as he tried to coax the machine's engine to life. The sight of the handgun froze him. "Out." Chang ordered. He clubbed the second alien into unconsciousness.

He paused for a moment over Liosh, pistol in hand. But shouts came echoing up from the mouth of the tunnel—and the Zan, after all, had been trying to save him. He turned and trotted toward the field. The smell of sap from crushed plants filled his nostrils.

He dug his handset from a pocket. "On my way!" he shouted.

"Took you long enough," *Praise of Folly* said tartly. "Things have been lively out here."

That, the scout pilot saw as he emerged from the undergrowth. was putting it mildly. Several armored vehicles blazed on the tarmac; they and the burning port buildings gave all the light there was.

Chang ran past corpses of Zanat and Slayor flung every which way in death, past wrecked spacecraft. He knew a moment's relief when he realized the *Praise of Folly* had been away from the worst of the fighting. Then a bullet whistled past his ear and another sponged viciously from concrete, and he realized that the greater distance did nothing for *his* safety.

Still, he was only one more shape moving through darkness, not likely to draw much fire and not a good target if he did. *Praise of Fully* stood tall a couple of hundred meters ahead.

He did not spy the Slayor until almost too late. The local slashed at him with a sword—no rapier this, but a great two-handed claymore. The blow went wide. Chang fired a point-blank range. and also

missed. He threw his pistol in that native's face. The Slayor went down, keening. Chang did not look back. He flew up *Praise of Folly's* boarding ladder three rungs at a time.

"Out of here!" he bawled the instant the airlock doors were sealed behind him. "They have more things to worry about now than us."

*Praise of Folly* outran the missiles that came streaking after her, sped toward free space. Chang whooped and punched for champagne.

His glee proved short-lived, for the Zanat spacecraft in orbital patrol were more alert than the distracted planetary forces. The radio crackled with challenges, which he ignored. Radar and contragrav detector warned of ship-to-ship missiles, faster and more deadly than ground-based weapons.

"Take 'em out," Chiang said, adding quickly, "Chemical warheads only. One day soon we'll have to deal with these people, and I don't want to be remembered for screwing up a whole planet with an electromagnetic pulse from our atomics."

But he did not want to be shot out of the sky, either, and did not tell *Praise of Folly* to degrade its countermissiles' performance. With better sensors and stronger contragravs, they easily destroyed the attackers. Small puffs of red and gold flame blossomed astern.

Far sooner than most pilots would have dared, he went over to hyperdrive. He was so exhilarated that the surge was over before he remembered he should have been sick.

He gunned *Praise of Folly* for all the ship was worth, trying to get out of detector range before his pursuers went FTL. For most of an hour, he thought he'd done it. Then a point of light winked on in the detector display, far behind but indisputably there. He swore and shifted vectors. The enemy followed. He swore again. He had already seen that the Zanat had good FTL instrumentation.

"Just have to run them into the ground, then," he muttered.

But the bogey refused to disappear. After awhile, another crawled onto the edge of the screen, and then two more. All were prominent echoes, warcraft for certain.

He tried to console himself with the truism fallen back on by every captain in trouble since the days of ships on Terran seas: a stern chase is a long chase. But when he looked at the detectors, he saw that it would not be long enough.

It was several days later, ship's time, when he and the computer finished commiserating with each other over his poor choice of drinking establishments. By then his lead, almost a light-year when he set out, had melted to hardly more than half an AU. The Zanat ships were maneuvering into englobement formation: if they surrounded him and touched his drive field with all theirs at once, they and he would be thrown into normal space together, with all the odds in their favor in the ensuing slugging match.

"I'll have to go sublight myself first," he decided unwillingly: the last resort of an outmatched pilot. "Maybe," he added without much belief, "they'll lose me." If the ploy would ever work, the Nebula was the place for it. Gas and dust could play merry hell with gadgetry.

Any particularly thick patches close by?" he asked hopefully.

The computer was silent for nearly a minute while it searched its memory and added corrections for several centuries of proper motion. At last it said, "As it happens, yes. We're near a Herbig-Haro object."

"New one on me," the scout pilot admitted. "What is it?"

"A luminous nebula with a denser center that—"

"Say no more that's exactly what we need. They'll have to have their engines linked to their detectors and drop out of hyperdrive the moment we do, or else overshoot and lose me for good. FTL, half an AU is nothing. Set our course so that when we and they break out, they'll be smack in the middle of that denser center." Chang let his optimism run wild. "One of them might even emerge coincident with a rock, and lower the odds. Can we fight three?"

"Not with our store of missiles depleted as it is," the computer answered at once. The scout pilot sighed. *Praise of Folly* went on. "Reconsider your plan. Herbig-Haro objects are—"

Chang was not about to be balked by mechanical mutiny. "Execute, and no chatter," he said harshly. "Override command."

The silence that fell had a reproachful quality to it. *Praise of Folly* changed course. Like hounds after a rabbit, the Zanat ships followed.

Chang's nails bit into his palms. His lead was a bare half-AU now, hardly seventy-five million kilometers. If this Herbig-Haro whatsit didn't show up soon, the Zanat would force him out of hyperdrive and fight on their own terms.

*Praise of Folly* gave a sudden, sickening lurch. Her normal-space instruments came back to life—and at that same instant, every alarm in the ship went off. Red lights flared, claxons hooted, bells jangled, a commotion to wake the dead.

Chang did not even notice it. His mouth hanging open, he was staring in disbelief at the view screens. "What the bleeding hell is a star doing there?" he said in something like a whispered scream.

A star it was, a crimson monster. *Praise of Folly* could hardly have been more than fifteen million kilometers from the edge of its chromosphere. Had Chang been on the surface of a planet at that distance, its great orb would have stretched across almost two-thirds of the sky.

He could peer deep through the tenuous gases of its outer atmosphere, could gauge the temperature of the swirling currents by their colors: here a ruby so deep the eye almost refused to register it, there a coruscating up rush of brighter, molten red. It was like looking down on a stormy ocean of flaming wine.

The sight held Chung fascinated until he absently wiped his hand across his forehead. It came away slick with sweat, As the alarms could not, that reminded him where he was. Another few seconds and he would cook, no matter how well-shielded the ship was. His finger jabbed the hyperdrive switch.

The abused engines groaned, but the wrench that sent *Praise of Folly* FTL was the most welcome thing he had ever felt. The clamor of alarms faded away. Nothing whatever showed on the hyperdrive detector. Chang shivered. "One thing's certain, they never knew what hit'em." Moths in a blowtorch—

He shivered again as reaction set in. That could have been him emerging in the center of a star . . . a star the computer had not known about. "You almost fried out both!" he howled.

There was no reply. He remembered his last command. "Override lifted," he said. "I want to hear what you have to say for yourself. Why did you think you were diving into a nebula instead of a star?"

"That should be obvious even to you," the computer said, testy as usual after an override. "When my navigation data was compiled, that star did not exist."

"Tell me another one," Chang snorted, "one I'll believe."

"Your ignorance is not my problem, except that it almost destroyed *Praise of Folly*, and you with it. You would not listen to my warning. As long ago as the end of the second century pre-Confederacy, astronomers knew that a Herbig-Haro object was the precursor to a star."

"You really mean it," the scout pilot said in wonder.

"Yes, I really do," The computer seemed determined to get its own back. "Why do you think a Herbig-Haro object is luminous? The energy emitted by the slowly condensing cloud in the center ionizes the gas around it and makes it glow.

"But when gravitational contraction brings the cloud down to about the size of Sol's system—say, eighty AU's across—something new happens. Some of the energy inside stops going into heating the gas of the cloud and starts breaking up hydrogen molecules and such in the center, things are beginning to get hot in there.

"And when that energy gets diverted, there isn't enough gas pressure left to support the outside of the cloud any more. It falls in on itself over the next half a standard year or so, until it shrinks to a diameter of about eight-tenths of an AU. Then the heat and pressure generated by the collapse restore equilibrium and the new star becomes visible, with a surface temperature of 4,000° K or so."

"Visible! I should say so." Chang would never forget that fierce red glare. "Why hasn't any survey

since the old Confederacy come by and noticed it?"

"There isn't much human traffic out this way," *Praise of Folly* said with what sounded like an electronic shrug. "And no one on more traveled routes would have seen the star yet; its light simply hasn't traveled far enough. From its diameter and spectrum, it can hardly have been shining longer than twenty years."

"Twenty years," the scout pilot murmured. As the fear leached out of him, awe began to replace it, the awe of having been present at the biggest birth in recorded history.

"Shape direct course for home," he told *Praise of Folly*. "Now I have something to keep B'kila happy and the astrophysicists too." His expression suddenly went mercenary. "I wonder how much I can get for the tapes."

The air inside B'kila's sanctum was conditioned to the same temperature as every other part of Salvage Service Central, but always seemed five Celsius colder. "Incompetent," she was saying, "fumbling, harebrained, lucky—lucky twice, which is more than anyone deserves." She sounded annoyed that Chang had come back at all.

He grinned like an impudent schoolboy. "Who is it who teaches that nothing matters like results? And how do you like my results, O mentor mine?"

"I can find flaws there too," she said grimly. "These Zanat of yours will have to be reckoned with. From your tapes, I'd rate their technology at the level of mid-twentieth century Terra: say, 130 pre-Confederacy. There can't be more than a couple of hundred planets in human space that can match them, and no three of those trust a fourth, Loki sadly included. Now a whole united species knows where we are."

"They had a fair notion before I met them," Chang replied. "And we can hope they also have the idea we're a good people to stay away from. They took out our first scouts, yes, but from what Liosh said they had to work for it. Then they sent four good-sized warships after *Praise of Folly*, and lost every one."

"No thanks to you," B'kila said.

"Ah, but they don't know that. What can they think? Either *Praise of Folly* handled all four of their bigger ships by itself, or else everything I told them about the Confederacy was true, and I had reinforcements waiting. Neither prospect can appeal to them,"

B'kila smiled thinly. "You didn't make a hash of that," she admitted. "By all odds, it was the best you did out of the whole mission."

"Well, not quite," Chang said. His tapes and records had sent the entire astronomy department of the Collegium of Loki into ecstasies, and fetched even more than he expected. He had plenty for a really first-class spree, to make up for the one B'kila had cheated him out of.

She was not through with him yet, though. "How do you read the Zanat? Do you really believe they'll avoid us, say by fortifying their Sphere to the eyebrows and waiting for trouble to find them, or will they come looking to see what went wrong. Honestly, now."

Chang's smile slowly disappeared. B'kila had a way of picking to the heart of problems. The scout pilot had to answer, "I'm afraid they'll come looking."

"That was the impression your reports gave me," she nodded, "but firsthand experience and the feel it brings are worth more than all the reports ever recorded. It was important to have your judgment check mine."

B'kila doled out compliments sparingly. Flushed under the effects of this one. Chang ventured, "When Liosh was grilling me, I had the impression that you and he would have worked well together." He brought the notion out hesitantly: it half-pleased and half-disturbed him.

She did not turn a hair. "I think so too," she replied. "Yes, as a species they're quite a bit like

us—altogether too much, as a matter of fact." She sighed and shook her head. "Interesting times, interesting times."

She turned away as if Chang was not there, spoke into her phone box: "Josip, Neelam, are you in place? It'll be plan two." The scout pilot took his leave; B'kila did not stand on ceremony, and often went straight from one piece of business to the next. She paid no attention to his departure.

Just outside Salvage Service Central, though, another of those curseworthy young lieutenants saluted and said, "Excuse me, sir, are you Master Pilot Chang? I'm Josip Bros; I'll be briefing you on your new assignment."

Chang's mind raced. As usual, B'kila was one step ahead of him, but this time he could see where she was going. "Interesting times" translated to "crisis," and he knew only too well what the crisis was. He also knew with sudden dreadful certainty that his leave was about to get canceled again.

Not without a fight, though. "Chang?" he said blandly. "No, he's an older fellow. I did see him in the lobby, if you're looking for him." As Josip Bruz trustingly turned his back, the scout pilot bolted.

Lieutenant Neelam Sanjiva Reddy corralled him, of course, before he made a hundred meters.