

Here is a story set in a more distant future when humankind travels to far stars routinely. Exobiology, the study of life forms beyond the earth, is a young enough branch of biology to be called "applied science fiction" as practiced by a science specialist of one kind or another. Studies in this field include characterizing hypothetical planetary environments, the native life which might exist in such alien ecologies, and how such life might be observed, directly or indirectly. But short of actually traveling to the planets of other solar systems, the only life which we might be able to detect at a distance around other stars is intelligent life. Drawing on background from astrophysics, exobiology, planetary composition, Glen Cook creates an alien environment inhabited by intelligent life vastly different from us. And in what is also an exciting adventure story, he manages to raise serious ethical dilemmas about our possible relationship to such intelligences.

G.Z.

IN THE WIND

Glen Cook

I

It's quiet up there, riding the ups and downs over Ginnunga Gap. Even in combat there's no slightest clamor, only a faint scratch and whoosh of strikers tapping igniters and rockets smoking away. The rest of the time, just a sleepy whisper of air caressing your canopy. On patrol it's hard to stay alert and wary.

If the aurora hadn't been so wild behind the hunched backs of the Harridans, painting glaciers and snowfields in ropes of varicolored fire, sequinning snow-catches in the weathered natural castles of the Gap with momentary reflections, I might have dozed at the stick the morning I became von Drachau's wingman. The windwhales were herding in the mountains, thinking migration, and we were flying five or six missions per day. The strain was almost unbearable.

But the auroral display kept me alert. It was the strongest I'd ever seen. A ferocious magnetic storm was developing. Lightning grumbled between the Harridans' copper peaks, sometimes even speared down and danced among the spires in the Gap. We'd all be grounded soon. The rising winds, cold but moisture-heavy, promised weather even whales couldn't ride.

Winter was about to break out of the north, furiously, a winter of a Great Migration. Planets, moons and sun were right, oracles and omens predicting imminent Armageddon. Twelve years had ticked into the ashcan of time. All the whale species again were herding. Soon the fighting would be hard and hopeless.

There are four species of windwhale on the planet Camelot, the most numerous being the Harkness whale, which migrates from its north arctic and north temperate feeding ranges to equatorial mating grounds every other year. Before beginning their migration they, as do all whales, form herds-which, because the beasts are total omnivores, utterly strip the earth in their passage south. The lesser species, in both size and numbers, are Okumura's First, which mates each three winters, Rosenberg's, mating every fourth, and the rare Okumura's Second, which travels only once every six years.

Unfortunately. . .

It takes no mathematical genius to see the factors of twelve. And every twelve years the migrations do coincide. In the Great Migrations the massed whales leave tens of thousands of square kilometers of devastation in their wake, devastation from which, because of following lesser migrations, the routes barely recover before the next Great Migration. Erosion is phenomenal. The monsters, subject to no natural control other than that apparently exacted by creatures we called mantas, were destroying the continent on which our employers operated. Ubichi Corporation had been on Camelot twenty-five years. The original exploitation force, though equipped to face the world's physical peculiarities, hadn't been prepared for whale migrations. They'd been lost to a man, whale supper, because the Corporation's pre-exploitation studies had been so cursory. Next Great Migration another team, though they'd dug in, hadn't fared much better. Ubichi still hadn't done its scientific investigation. In fact, its only action was a determination that the whales had to go.

Simple enough, viewed from a board room at Geneva. But practical implementation was a nightmare under Camelot's technically stifling conditions. And the mantas recompllicated everything.

My flight leader's wagging wings directed my attention south. From a hill a dozen kilometers down the cable came flashing light, Clonninger Station reporting safe arrival of a convoy from Derry. For the next few hours we'd have to be especially alert.

It would take the zeppelins that long to beat north against the wind, and all the while they would

be vulnerable to mantas from over the Gap. Mantas, as far as we could see at the time, couldn't tell the difference between dirigibles and whales. More air cover should be coming up. . . Von Drachau came to Jaeger Gruppe XIII (Corporation Armed Action Command's unsubtle title for our Hunter Wing, which they used as a dump for problem employees) with that convoy, reassigned from JG IV, a unit still engaged in an insane effort to annihilate the Sickie Islands whale herds by means of glider attacks carried out over forty-five kilometers of quiet seas. We'd all heard of him (most JG XIII personnel had come from the Sickie Islands operation), the clumsiest, or luckiest incompetent, pilot flying for Ubichi. While scoring only four kills he'd been bolted down seven times-and had survived without a scratch. He was the son of Jupp von Drachau, the Confederation Navy officer who had directed the planet-busting strike against the Sangaree homeworld, a brash, sometimes pompous, always self-important nineteen year old who thought that the flame of his father's success should illuminate him equally-and yet resented even a mention of the man. He was a dilettante, come to Camelot only to fly. Unlike the rest of us, Old Earthers struggling to buy out of the poverty bequeathed us by prodigal ancestors, he had no driving need to give performance for pay.

An admonition immediately in order: I'm not here to praise von Drachau, but to bury him. To let him bury himself. Aerial combat fans, who have never seen Camelot, who have read only corporate propaganda, have made of him a contemporary "hero", a flying do-no-wrong competitor for the pewter crown already contested by such antiques as von Richtoffen, Hartmann and Galland. Yet these Archaicists can't, because they need one, make a platinum bar from a turd, nor a socio-psychological fulfillment from a scatterbrain kid. . .*

Most of the stories about him are apocryphal accretions generated to give him depth in his later, "heroic" aspect. Time and storytellers increase his stature, as they have that of Norse gods, who might've been people who lived in preliterate times. For those who knew him (and no one is closer than a wingman), though some of us might like to believe the legends, he was just a selfish, headstrong, tantrum-throwing manchild-albeit a fighter of supernatural ability. In the three months he spent with us, during the Great Migration, his peculiar talents and shortcomings made of him a creature larger than life. Unpleasant a person as he was, he became the phenom pilot.

*This paragraph is an editorial insertion from a private letter by Salvador del Gado. Dogfight believes it clarifies del Gado's personal feelings toward his former wingman. His tale, taken separately, while unsympathetic, strives for an objectivity free of his real jealousies. It is significant that he mentions Hartmann and Galland together with von Richtoffen; undoubtedly they, as he when compared with von Drachau, were flyers better than the Red Knight, yet they, and del Gado, lack the essential charisma of the flying immortals. Also, von Richtoffen and von Drachau died at the stick; Hartmann and Galland went on to more prosaic things, becoming administrators, commanders of the Luftwaffe. Indications are that del Gado's fate with Ubichi Corporation's Armed Action Command will be much the same.

-Dogfight

II

The signals from Clonninger came before dawn, while only two small moons and the aurora lighted the sky. But sunrise followed quickly. By the time the convoy neared Beadle Station (us), Camelot's erratic, blotchy-faced sun had cleared the eastern horizon. The reserve squadron began catapulting into the Gap's frenetic drafts. The four of us on close patrol descended toward the dirigibles. The lightning in the Harridans had grown into a Ypres cannonade. A net of jagged blue laced together the tips of the copper towers in the Gap. An elephant stampede of angry clouds rumbled above the mountains. The winds approached the edge of being too vicious for flight. Flashing light from ground control, searchlight fingers stabbing north and east, pulsating. Mantas sighted. We waggle-winged acknowledgment, turned for the Gap and updrafts. My eyes had been on the verge of rebellion, demanding sleep, but in the possibility of combat weariness temporarily faded. Black specks were coming south low against the daytime verdigris of the Gap, a male-female pair in search of a whale. It was obvious how they'd been named. Anyone familiar with Old Earth's sea creatures could see a remarkable resemblance to the manta ray-though these had ten meter bodies, fifteen meter wingspans, and ten meter tails tipped by devil's spades of rudders. From a distance they appeared black, but at attack range could be seen as deep, uneven green on top and lighter, near olive beneath. They had ferocious habits. More signals from the ground. Reserve ships would take the mantas. Again we turned, overflew the convoy.

It was the biggest ever sent north, fifteen dirigibles, one fifty meters and larger, dragging the line from Clonninger at half kilometer intervals, riding long reaches of running cable as their sailmen struggled to tack them into a facing wind. The tall glasteel pylons supporting the cable

track were ruby towers linked by a single silver strand of spider silk running straight to Clonninger's hills.

We circled wide and slow at two thousand meters, gradually dropping lower. When we got down to five hundred we were replaced by a flight from the reserve squadron while we scooted to the Gap for an updraft. Below us ground crews pumped extra hydrogen to the barrage balloons, lifting Beadle's vast protective net another hundred meters so the convoy could slide beneath. Switchmen and winchmen hustled about with glass and plastic tools in a dance of confusion. We didn't have facilities for receiving more than a half dozen zeppelins-though these, fighting the wind, might come up slowly enough to be handled.

More signals. More manta activity over the Gap, the reserve squadron's squabble turning into a brawl. The rest of my squadron had come back from the Harridans at a run, a dozen mantas in pursuit. Later I learned our ships had found a small windwhale herd and while one flight busied their mantas the other had destroyed the whales. Then, ammunition gone, they ran for home, arriving just in time to complicate traffic problems.

I didn't get time to worry it. The mantas, incompletely fed, spotted the convoy. They don't distinguish between whale and balloon. They went for the zeppelins.

What followed becomes dulled in memory, so swiftly did it happen and so little attention did I have to spare. The air filled with mantas and lightning, gliders, smoking rockets, explosions. The brawl spread till every ship in the wing was involved. Armorers and catapult crews worked to exhaustion trying to keep everything up. Ground batteries seared one another with backblast keeping a rocket screen between the mantas and stalled convoy-which couldn't warp in while the entrance to the defense net was tied up by fighting craft (a problem unforeseen but later corrected by the addition of emergency entryways). They winched their running cables in to short stay and waited it out. Ground people managed to get barrage balloons with tangle tails out to make the mantas' flying difficult.

Several of the dirigibles fought back. Stupid, I thought. Their lifting gas was hydrogen, screamingly dangerous. To arm them seemed an exercise in self-destruction.

So it proved. Most of our casualties came when a ship loaded with ground troops blew up, leaking gas ignited by its own rockets. One hundred eighty-three men burned or fell to their deaths. Losses to mantas were six pilots and the twelve man crew of a freighter.

III

Von Drachau made his entry into JG XIII history just as I dropped from my sailship to the packed earth parking apron. His zepp was the first in and, having vented gas, had been towed to the apron to clear the docking winches. I'd done three sorties during the fighting, after the six of regular patrol. I'd seen my wingman crash into a dragline pylon, was exhausted, and possessed by an utterly foul mood. Von Drachau hit dirt long-haired, unkempt, and complaining, and I was there to greet him. "What do you want to be when you grow up, von Drachau?"

Not original, but it caught him off guard. He was used to criticism by administrators, but pilots avoid antagonism. One never knows when a past slight might mean hesitation at the trigger ring and failure to blow a manta off one's tail. Von Drachau's hatchet face opened and closed, goldfish-like, and one skeletal hand came up to an accusatory point, but he couldn't come back.

We'd had no real contact during the Sickie Islands campaign. Considering his self-involvement, I doubted he knew who I was--and didn't care if he did. I stepped past and greeted acquaintances from my old squadron, made promises to get together to reminisce, then retreated to barracks. If there were any justice at all, I'd get five or six hours for surviving the morning.

I managed four, a record for the week, then received a summons to the office of Commander McClennon, a retired Navy man exiled to command of JG XIII because he'd been so outspoken about Corporation policy.

(The policy that irked us all, and which was the root of countless difficulties, was Ubichi's secret purpose on Camelot. Ubichi deals in unique commodities. It was sure that Camelot operations were recovering one such, but fewer than a hundred of a half million employees knew what. The rest were there just to keep the wind-whales from interfering. Even we mercenaries from Old Earth didn't like fighting for a total unknown.)

Commander McClennon's outer office was packed, old faces from the wing and new from the convoy. Shortly, McClennon appeared and announced that the wing had been assigned some gliders with new armaments, low velocity glass barrel gas pressure cannon, pod of four in the nose of a ship designed to carry the weapon system. . .immediate interest. Hitherto we'd flown sport gliders jury-rigged to carry crude rockets, the effectiveness of which lay in the cyanide shell surrounding the warhead. Reliability, poor; accuracy, erratic. A pilot was nearly as likely to kill himself as a

whale. But what could you do when you couldn't use the smallest scrap of metal? Even a silver filling could kill you there. The wildly oscillating and unpredictable magnetic ambience could induce sudden, violent electrical charges. The only metal risked inside Camelot's van Aliens was that in the lighters running to and from the surface station at the south magnetic pole, where few lines of force were cut and magnetic weather was reasonably predictable.

Fifty thousand years ago the system passed through the warped space surrounding a black hole. Theory says that's the reason for its eccentricities, but I wonder. Maybe it explains why all bodies in the system have magnetic fields offset from the body centers, the distance off an apparent function of size, mass and rate of rotation, but it doesn't tell me why the fields exist (planetary magnetism is uncommon), nor why they pulsate randomly.

But I digress, and into areas where I have no competence. I should explain what physicists don't understand? We were in the Commander's office and he was selecting pilots for the new ships. Everyone wanted one. Chances for survival appeared that much better.

McClennon's assignments seemed indisputable, the best flyers to the new craft, four flights of four, though those left with old ships were disappointed.

I suffered disappointment myself. A blockbuster dropped at the end, after I'd resigned myself to continuing in an old craft.

"Von Drachau, Horst-Johann," said McClennon, peering at his roster through antique spectacles, one of his affectations, "attack pilot. Del Gado, Salvador Martin, wingman."

Me? With von Drachau? I'd thought the old man liked me, thought he had a good opinion of my ability. . .why'd he want to waste me? Von Drachau's wingman? Murder.

I was so stunned I couldn't yell let me out!

"Familiarization begins this afternoon, on Strip Three. First flight checkouts in the morning." A few more words, tired exhortations to do our best, all that crap that's been poured on men at the front from day one, then dismissal. Puzzled and upset, I started for the door.

"Del Gado. Von Drachau." The executive officer. "Stay a minute. The Commander wants to talk to you."

IV

My puzzlement thickened as we entered McClennon's inner office, a Victorian-appointed, crowded yet comfortable room I hadn't seen since I'd paid my first day respects. There were bits of a stamp collection scattered, a desk becluttered, presentation holographs of Navy officers that seemed familiar, another of a woman of the pale thin martyr type, a model of a High Seiner spaceship looking like it'd been cobbled together from plastic tubing and children's blocks. McClennon had been the Naval officer responsible for bringing the Seiners into Confederation in time for the Three Races War. His retirement had been a protest against the way the annexation was handled. Upset as I was I had little attention for surroundings, nor cared what made the Old Man tick. Once alone with us, he became a man who failed to fit my conception of a commanding officer. His face, which usually seemed about to slide off his skullbones with the weight of responsibility, spread a warm smile. "Johnny!" He thrust a wrinkled hand at von Drachau. He knew the kid? My new partner's reaction was a surprise, too. He seemed awed and deferential as he extended his own hand. "Uncle Tom."

McClennon turned. "I've known Johnny since the night he wet himself on my dress blacks just before the Grand Admiral's Ball. Good old days at Luna Command, before the last war." He chuckled. Von Drachau blushed. And I frowned in renewed surprise. I hadn't known von Drachau well, but had never seen or heard anything to suggest he was capable of being impressed by anyone but himself.

"His father and I were Academy classmates. Then served in the same ships before I went into intelligence. Later we worked together in operations against the Sangaree."

Von Drachau didn't sit down till invited. Even though McClennon, in those few minutes, exposed more of himself than anyone in the wing had hitherto seen, I was more interested in the kid. His respectful, almost cowed attitude was completely out of character.

"Johnny," said McClennon, leaning back behind his desk and slowly turning a drink in his hand, "you don't come with recommendations. Not positive, anyway. We going to go through that up here?"

Von Drachau stared at the carpet, shrugged, reminded me of myself as a seven year old called to explain some specially noxious misdeed to my creche-father. It became increasingly obvious that McClennon was a man with whom von Drachau was unwilling to play games. I'd heard gruesome stories of his behavior with the CO JGIV.

"You've heard the lecture already, so I won't give it. I do understand, a bit. Anyway, discipline

here, compared to Derry or the Islands, is almost nonexistent. Do your job and you won't have it bad. But don't push. I won't let you endanger lives. Something to think about. This morning's scrap left me with extra pilots. I can ground people who irritate me. Could be a blow to a man who loved flying."

Von Drachau locked gazes With the Commander. Rebellion stirred but he only nodded.

McClennon turned again. "You don't like this assignment." Not a question. My face must've been a giveaway. "Suicidal, you think? You were in JG IV a while. Heard all about Johnny. But you don't know him. I do, well enough to say he's got potential-if we can get him to realize aerial fighting's a team game. By which I mean his first consideration must be bringing himself, his wingman, and his ship home intact." Von Drachau grew red. He'd not only lost seven sailships during the Sickie Islands offensive, he'd lost three wing-men. Dead. "It's hard to remember you're part of a team while attacking. You know that yourself, del Gado. So be patient. Help me make something out of Johnny."

I tried to control my face, failed.

"Why me, eh? Because you're the best flyer I've got. You can stay with him if anyone can.

"I know, favoritism. I'm taking special care. And that's wrong. You're correct, right down the line. But I can't help myself. Don't think you could either, in my position. Enough explanation. That's the way it's going to be. If you can't handle it, let me know. I'll find someone who can, or I'll ground him. One thing I mean to do: send him home alive."

Von Drachau vainly tried to conceal his embarrassment and anger. I felt for him. Wouldn't like being talked about that way myself-though McClennon was doing the right thing, putting his motives on display, up front, so there'd be no surprises later on, and establishing for von Drachau the parameters allowed him. The Commander was an Old Earther himself, and on that battleground had learned that honesty is a weapon as powerful as any in the arsenal of deceit.

"I'll try," I replied, though with silent reservations. I'd have to do some handy self-examination before I bought the whole trick bag.

"That's all I ask. You can go, then. Johnny and I have some catching up to do."

I returned to barracks in a daze. There I received condolences from squadron mates motivated, I suppose, by relief at having escaped the draft themselves.

Tired though I was, I couldn't sleep till I'd thought everything through.

In the end, of course, I decided the Old Man had earned a favor. (This's a digression from von Drachau's story except insofar as it reflects the thoughts that led me to help bring into being the one really outstanding story in Ubichi's Camelot operation.) McClennon was an almost archetypically remote, secretive, Odin/Christ figure, an embastioned lion quietly licking private wounds in the citadel of his office, sharing his pain and privation with no one. But personal facts that had come flitting on the wings of rumor made it certain he was a rare old gentleman who'd paid his dues and asked little in return. He'd bought off for hundreds of Old Earthers, usually by pulling wires to Service connections. And, assuming the stories are true, the price he paid to bring the Starfishers into Confederation, at a time when they held the sole means by which the Three Races War could be won, was the destruction of a deep relationship with the only woman he'd ever loved, the pale Seiner girl whose holo portrait sat like an icon on his desk. Treason and betrayal. Earthman who spoke with forked tongue. She might've been the mother of the son he was trying to find in Horst-Johann. But his Isaac never came back from the altar of the needs of the race. Yes, he'd paid his dues, and at usurious rates.

He had something coming. I'd give him the chance he wanted for the boy. . .Somewhere during those hours my Old Earther's pragmatism lapsed. Old Number One, survival, took a temporary vacation. It felt good.

V

Getting along with von Drachau didn't prove as difficult as expected. During the following week I was the cause of more friction than he. I kept reacting to the image of the man rumor and prejudice had built in my mind, not to the man in whose presence I was. He was much less arrogant and abrasive than I'd heard-though gritty with the usual outworlder's contempt for the driving need to accomplish characteristic of Old Earthers. But I'd become accustomed to that, even understood. Outworlders had never endured the hopelessness and privation of life on the motherworld. They'd never understand what buying off really meant. Nor did any care to learn. There're just two kinds of people on Old Earth, butchers and bovines. No one starves, no one freezes, but those are the only positives of life in the Social Insurance warrens. Twenty billion unemployed sardines. The high point of many lives is a visit to Confederation Zone (old Switzerland), where government and corporations maintain their on-planet offices and estates and

allow small bands of citizens to come nose the candy store window and look at the lifestyle of the outworlds. . .then send them home with apathy overcome by renewed desperation.

All Old Earth is a slum/ghetto surrounding one small, stoutly defended bastion of wealth and privilege. That says it all, except that getting out is harder than from any historical ghetto. It's not really what Old Earth outworlders think of when they dust off the racial warm heart and talk about the motherworld. What they're thinking of is Luna Command, Old Earth's moon and the seat of Confederation government. All they have for Old Earth itself is a little shame-faced under-the-table welfare money. . .bitter. The only resource left is human life, the cheapest of all. The outworlds have little use for Terrans save for work like that on Camelot. So bitter. I shouldn't be. I've bought off. Not my problem anymore.

Horst (his preference) and I got on well, quickly advanced to first names. After familiarizing ourselves with the new equipment, we returned to regular patrols. Horst scattered no grit in the machinery. He performed his tasks-within-mission with clockwork precision, never straying beyond the borders of discipline. . .

He confessed, as we paused at the lip of Ginnunga Gap one morning, while walking to the catapults for launch, that he feared being grounded more than losing individuality to military conformity. Flying was the only thing his father hadn't programmed for him (the Commander had gotten him started), and he'd become totally enamored of the sport. Signing on with Ubichi had been the only way to stick with it after his father had managed his appointment to Academy; he'd refused, and been banished from paternal grace. He had to fly. Without that he'd have nothing. The Commander, he added, had meant what he said.

I think that was the first time I realized a man could be raised outwQild and still be deprived. We Old Earthers take a perverse, chauvinistic pride in our poverty and persecution-like, as the Commander once observed, Jews of Marrakech. (An allusion I spent months dredging: he'd read some obscure and ancient writers.) Our goals are so wholly materialistic that we can scarcely comprehend poverty of the spirit. That von Drachau, with wealth and social position, could feel he had less than I, was a stunning notion.

For him flying was an end, for me a means. Though I enjoyed it, each time I sat at catapult head credit signs danced in my head; so much base, plus per mission and per kill. If I did well I'd salvage some family, too. Horst's pay meant nothing. He wasted it fast as it came-I think to show contempt for the wealth from which he sprang. Though that had been honest money, prize and coup money from his father's successes against the Sangaree.

Steam pressure drove a glasteel piston along forty meters of glasteel cylinder; twenty seconds behind von Drachau I catapulted into the ink of the Gap and began feeling for the ups. For brief instants I could see him outlined against the aurora, flashing in and out of vision as he searched and circled. I spied him climbing, immediately turned to catch the same riser. Behind me came the rest of the squadron. Up we went in a spiral like moths playing tag in the night while reaching for the moons. Von Drachau found altitude and slipped from the up. I followed. At three thousand meters, with moonlight and aurora, it wasn't hard to see him. The four craft of my flight circled at ninety degree points while the rest of the squadron went north across the Gap. We'd slowly drop a thousand meters, then catch another up to the top. We'd stay in the air two hours (or we ran out of ammunition), then go down for an hour break. Five missions minimum.

First launch came an hour before dawn, long before the night fighters went down. Mornings were crowded. But by sunrise we seemed terribly alone while we circled down or climbed, watched the Gap for whales leaving the Harridans or the mantas that'd grown so numerous.

Daytimes almost every ship concentrated on keeping the whales north of the Gap. That grew more difficult as the density of their population neared the migratory. It'd be a while yet, maybe a month, but numbers and instinct would eventually overcome the fear our weapons had instilled. I couldn't believe we'd be able to stop them. The smaller herds of the 'tween years, yes, but not the lemming rivers that would come with winter. A Corporation imbued with any human charity would've been busy sealing mines and evacuating personnel. But Ubichi had none. In terms of financial costs, equipment losses, it was cheaper to fight, sacrificing inexpensive lives to salvage material made almost priceless by interstellar shipment.

VI

Signals from the ground, a searchlight fingering the earth and flashing three times rapidly. Rim sentries had spotted a whale in the direction the finger pointed. Von Drachau and I were front. We began circling down.

We'd dropped just five hundred meters when he wag-winged visual contact. I saw nothing but the darkness that almost always clogged the canyon. As wide as Old Earth's Grand Canyon and three

times as deep, it was well lighted only around noon.

That was the first time I noticed his phenomenal vision. In following months he was to amaze me repeatedly. I honestly believe I was the better pilot, capable of outflying any manta, but his ability to find targets made him the better combat flyer.

The moment I wagged back he broke circle and dove. I'd've circled lower. If the whale was down in the Gap itself that might mean a three thousand meter fall. Pulling out would overstrain one's wings. Sailplanes, even the jackboot jobs we flew, are fragile machines never intended for stunt flying.

But I was wingman, responsible for protecting the attack pilot's rear. I winged over and followed, maintaining a constant five hundred meters between us. Light and shadow from clouds and mountains played over his ship, alternately lighting and darkening the personal devices he'd painted on. A death's-head grinned and winked. . .

I spied the whale. It was working directly toward Beadle. Size and coloring of the gasbag (oblate spheroid sixty meters long, patched in shades from pink to scarlet and sported with odd other colors at organ sites) indicated a juvenile of the Harkness species, that with the greatest potential for destruction. Triangular vanes protruding ten meters from muscle rings on the bag twitched and quivered as the monster strove to maintain a steady course. Atop it in a thin Mohawk swath swayed a copse of treelike organs believed to serve both plant-like and animal digestive and metabolic functions. Some may have been sensory. Beneath it sensory tentacles trailed, stirring fretfully like dreaming snakes on the head of Medusa. If any found food (and anything organic was provender for a Harkness), it'd anchor itself immediately. Hundreds more tentacles would descend and begin lifting edibles to mouths in a tiny head-body tight against the underside of the gasbag. There'd be a drizzling organic rainfall as the monster dumped ballast/waste. Migrating whale herds could devastate great swaths of countryside. Fortunately for Ubichi's operations, the mating seasons were infrequent.

The Harkness swelled ahead. Horst would be fingering his trigger ring, worrying his sights. I stopped watching for mantas and adjusted my dive so Horst wouldn't be in line when I fired. . . Flashing lights, hasty, almost panicky. I read, then glanced out right and up, spied the manta pair. From high above the Harridans they arrowed toward the whale, tips and trailing edges of their wings rippling as they adjusted dive to each vagary of canyon air. But they were a kilometer above and would be no worry till we'd completed our pass. And the other two ships of our flight would be after them, to engage while Horst and I completed the primary mission.

The relationship between mantas and whales had never, to that time, been clearly defined. The mantas seemed to feed among the growths on whale backs, to attach themselves in mated pairs to particular adults, which they fiercely defended, and upon which they were apparently dependent. But nothing seemed to come the other way. The whales utterly ignored them, even as food. Whales ignored everything in the air, though, enduring our attacks as if they weren't happening. If not for the mantas, the extermination program would've been a cakewalk.

But mantas fought at every encounter, almost as if they knew what we were doing. A year earlier they'd been little problem. Then we'd been sending single flights after lone wandering whales, but as migratory pressures built the manta population had increased till we were forced to fight three or four battles to each whale attack-of which maybe one in twenty resulted in a confirmed kill. Frustrating business, especially since self-defense distracted so from our primary mission.

Luckily, the mantas had only one inefficient, if spectacular, weapon, the lightning they hurled.

That fool von Drachau dropped flaps to give himself more firing time. Because I began overtaking him, I had to follow suit. My glider shuddered, groaned, and an ominous snap came from my right wing. But nothing fell apart.

Fog formed before Horst's craft, whipped back. He'd begun firing. His shells painted a tight bright pattern in the forest on the whale's back. Stupidly, I shifted aim to the same target. Von Drachau pulled out, flaps suddenly up, used his momentum to hurl himself up toward the diving manta pair, putting them in a pincer.

A jagged bite of lightning flashed toward von Drachau. I cursed. We'd plunged into a trap. Mantas had been feeding in the shelter of the whale's back organs. They were coming up to fight.

I'd begun firing an instant before the flash, putting my shells in behind Horst's. Before the water vapor from my cannon gas fogged my canopy I saw explosions digging into the gasbag. I started to stick back and fire at the mantas, but saw telltale ripples of blue fire beneath the yellow of my shells. The bag was going to blow. When the hydrogen went there'd be one hell of an explosion.

Following Horst meant suicide.

The prime purpose of the explosives was to drive cyanide fragments into whale flesh, but

sometimes, as then, a too tight pattern breached the main bag-and hydrogen is as dangerous on Camelot as elsewhere.

I took my only option, dove. With luck the whale's mass would shadow me from the initial blast. It did. But the tip of my right wing, that'd made such a grim noise earlier, brushed one of the monster's sensory tentacles. The jerk snapped it at the root. I found myself spinning down. I rode it a while, both because I was stunned (I'd never been downed before, accidentally or otherwise) and because I wanted the craft to protect me from downblast.

The sun had risen sufficiently to illuminate the tips of the spires in the gap. They wheeled, jerked, reached up like angry claws, drawing rapidly closer. Despite the ongoing explosion, already shaking me, blistering the paint on my fuselage, I had to get out.

Canopy cooperated. In the old gliders they'd been notoriously sticky, costing many lives. This popped easily. I closed my eyes and jumped, jerking my ripcord as I did. Heat didn't bother me. My remaining wing took a cut at me, a last effort of fate to erase my life-tape, then the chute jerked my shoulders. I began to sway.

It was cold and lonely up there, and there was nothing I could do. I was no longer master of my fate. You would have to be an Old Farther near buying off to really feel the impact of that. Panicky, I peered up at the southern rim of the Gap-and saw what I'd hoped to see, the rescue balloon already on its way. It was a hot air job that rode safety lines payed out from winches at the edge. If I could be salvaged, it'd be managed. I patted my chest pockets to make sure I had my flares.

Only then did I rock my chute away so I could see what'd happened to von Drachau. He was into it with three mantas, one badly wounded (the survivor of the pair from the Harkness-the other had died in the explosion). He got the wounded one and did a flap trick to turn inside the others. His shells went into the belly of one. It folded and fell. Then the rest of our flight was pursuing the survivor toward the Harridans.

I worried as burning pieces of whale fell past. Suppose one hit my chute?

But none did. I landed in snow deep in the Gap, after a cruel slide down an almost vertical rock face, then set out my first flare. While I tried to stay warm, I thought about von Drachau.

I'd gone along with his attack because I'd had neither choice, nor time to think, nor any way to caution him. But that precipitous assault had been the sort that'd earned him his reputation. And it'd cost again. Me.

Didn't make me feel any better to realize I'd been as stupid in my target selection.

A rational, unimpetuous attack would've gone in level with the whale, from behind, running along its side. Thus Horst could've stayed out of sight of the mantas riding it, and I could've avoided the explosion resulting from a tight fire pattern in the thin flesh of the back. Shells laid along the whale's flanks would've spread enough cyanide to insure a kill.

Part my fault, but when the rescue balloon arrived I was so mad at Horst I couldn't talk.

VII

Von Drachau met the rescue balloon, more concerned and contrite than I'd've credited. I piled out steaming, with every intention of denting his head, but he ran to me like a happy puppy, bubbling apologies, saying he'd never had a chance at a whale. . .righteous outrage became grumpiness. He was only nineteen, emotionally ten.

There were reports to be filed but I was in no mood. I headed for barracks and something alcoholic.

Von Drachau followed. "Sal," he said with beer in his mustache, "I mean it. I'm sorry. Wish I could look at it like you. Like this's just a job. . ."

"Uhm." I made a grudging peace. "So can it." But he kept on. Something was biting him, something he wanted coaxed out.

"The mantas," he said. "What do we know about them?"

"They get in the way."

"Why? Territorial imperative? Sal, I been thinking. Was today a set-up? If people was working the other side, they couldn't've set a better trap. In the old ships both of us would've gone down."

"Watch your imagination, kid. Things're different in the Islands, but not that different. We've run into feeding mantas before. You just attacked from the wrong angle." I tossed off my third double. The Gap bottom cold began leaking from my bones. I felt a bit more charitable. But not enough to discuss idiot theories of manta intelligence.

We already knew many odd forms of intelligence. Outworlders have a curious sensitivity to it, a near reverence puzzling to Old Earthers. They go around looking for it, especially in adversity.

Like savages imputing powers to storms and stones, they can't accept disasters at face value. There has to be a malignant mover.

"I guess you're right," he said. But his doubt was plain. He wanted to believe we were fighting a war, not exterminating noxious animals.

Got me thinking, though. Curious how persistent the rumor was, even though there was no evidence to support it. But a lot of young people (sic!-I was twenty-eight) are credulous. A pilot, dogfighting a manta pair, might come away with the notion. They're foxy. But intelligence, to me, means communication and cooperation. Mantas managed a little of each, but only among mates. When several pairs got involved in a squabble with us, we often won by maneuvering pairs into interfering with one another.

The matter dropped and, after a few more drinks, was forgotten. And banished utterly when we were summoned to the Commander's office.

The interview was predictable. McClennon was determined to ground von Drachau. I don't know why I defended him. Labor united against management, maybe. . .

Guess Horst wasn't used to having a friend at court. When we left he thanked me, but seemed puzzled, seemed to be wrestling something inside.

Never did find out what, for sure-Old Earthers are tight-lipped, but von Drachau had the best of us beaten-but there was a marked improvement in his attitude. By the end of the month he was on speaking terms with everyone, even men he'd grossly alienated at JGIV.

That month I also witnessed a dramatic improvement in Horst's shooting. His kills in the Sickle Islands had been almost accidental. Changing from rockets to cannons seemed to bring out his talent. He scored kill after kill, attacking with a reckless abandon (but always with a care to keep me well positioned). He'd scream in on a manta, drop flaps suddenly, put himself into a stall just beyond the range of the manta's bolt, then flaps up and fall beneath the monster when he'd drawn it, nose up and trigger a burst into its belly. Meanwhile, I would fend off the other till he was free. My kill score mounted, too.

His was astonishing. Our first four weeks together he downed thirty-six mantas. I downed fourteen, and two whales. I'd had fifty-seven and twelve for four years' work when he arrived, best in the wing. It was obvious that, if he stayed alive, he'd soon pass not only me but Aultmann Zeisler, the CO JG I, a ten year veteran with ninety-one manta kills.

Horst did have an advantage we older pilots hadn't. Target availability. Before, except during the lesser migrations, the wing had been lucky to make a dozen sightings per month. Now we piled kills at an incredible rate.

Piled, but the tilt of the mountain remained against us. Already stations farther south were reporting sightings of small herds that had gotten past us.

It was coming to the point where we were kept busy by mantas. Opportunities to strike against whales grew rare. When the main migratory wave broke we'd be swamped.

Everyone knew it. But Derry, despite sending reinforcements, seemed oblivious to the gravity of the situation. Or didn't care. A sour tale began the rounds. The Corporation had written us off. The whales would remove us from the debit ledger. That facilities at Clonninger and stations farther down the cable were being expanded to handle our withdrawal didn't dent the rumors. We Old Earthers always look on the bleak side.

In early winter, after a severe snowstorm, as we were digging out, we encountered a frightening phenomenon. Cooperation among large numbers of mantas.

VIII

It came with sunrise. Horst and I were in the air, among two dozen new fighters. The wing had been reinforced to triple strength, one hundred fifty gliders and a dozen armed zeppelins, but those of us up were all the ground personnel had been able to dig out and launch.

Signals from ground. Against the aurora and white of the Harridans I had no trouble spotting the Harkness whales, full adults, leaving a branch canyon opposite Beadle. Close to a hundred, I guessed, the biggest lot yet to assault the Gap. We went to meet them, one squadron circling down. My own squadron, now made up of men who'd shown exceptional skill against mantas, stayed high to cover. We no longer bothered with whales, served only as cover for the other squadron.

I watched for mantas. Had no trouble finding them. They came boiling 'round the flank of an ivory mountain, cloud of black on cliff of white, a mob like bats leaving a cave at sunset. Hundreds of them.

My heart sank. It'd be thick, grim, and there was no point even thinking about attack formations.

All a man could do was keep away and grab a shot at opportunity. But we'd take losses. One couldn't watch every way at once.

A few mantas peeled off and dove for the ships attacking the whales. The bulk came on, following a line that'd cross the Dase.

We met. There were gliders, mantas, shells and lightning bolts thicker than I'd ever seen. Time stood still. Mantas passed before me, I pulled trigger rings. Horst's death's-head devices whipped across my vision. Sometimes parts of gliders or mantas went tumbling by. Lower and lower we dropped, both sides trading altitude for speed.

Nose up. Manta belly before me, meters away. Jerk the rings. Fog across the canopy face, but no explosions against dark flesh. We struggled to avoid collision, passed so close we staggered one another with our slipstreams. For a moment I stared into two of the four eyes mounted round the thing's bullet head. They seemed to drive an electric line of hatred deep into my brain. For an instant I believed the intelligence hypothesis. Then shuddered as I stuck down and began a rabbit run for home, to replace my ammunition.

A dozen mantas came after me. Horst, alone, went after them. I later learned that, throwing his craft about with complete abandon, he knocked nine of those twelve down before his own ammunition ran out. It was an almost implausible performance, though one that need not be dwelt upon. It's one of the mainstays of his legend, his first ten-kill day, and every student of the fighting on Camelot knows of it.

The runway still had a half meter of snow on it. The three mantas followed me in, ignoring the counterfire of our ground batteries. I was so worried about evading their bolts that I went in poorly, one wing down, and ended up spinning into a deep drift. As a consequence I spent two hours grounded.

What I missed was sheer hell. The mantas, as if according to some plan, clamped down on our landing and launching gates, taking their toll while our craft were at their most vulnerable. In the early going some tried to blast through the overhead netting. That only cost them lives. Our ground batteries ate them up. Then they tried the barrage balloons, to no better effect.

Then the whales arrived. We'd been able to do nothing to stop them, so busy had the mantas kept us. They, sensing food beneath the net, began trying to break in. Our ground batteries fired into the dangling forests of their tentacles, wrecking those but doing little damage to the beasts themselves. Gigantic creaks and groans came from the net anchor points.

For pilots and ground crews there was little to do but prepare for a launch when circumstances permitted. I got my ship out, rearmed, and dragged to catapult head. Then for a time I stood observer, using binoculars to watch those of our craft still up.

In all, the deaths of a hundred fourteen mantas (four mine, ten Horst's) and twenty-two whales were confirmed for the first two hours of fighting. But we would've gone under without help from down the cable.

When the desperation of our position became obvious the Commander signalled Clonninger. Its sailcraft came north, jumped the mantas from above. They broke siege. We launched, cats hurling ships into the Gap as fast as steam could be built. Horst and I went in the first wave.

Help had come just in time. The whales had managed several small breaches in the netting and were pushing tentacles through after our ground people.

Even with help the situation remained desperate. I didn't think it'd take long for the mantas, of which more had come across, to clamp down again. When they did it'd only be a matter of time till the whales wrecked the net. I pictured the base destroyed, littered with bones.

Before we launched, the Commander, ancient with the strain, spoke with each pilot. Don't know what he said to the others, but I imagine it was much what he told me: if I judged the battle lost, to run south rather than return here. The sailcraft had to be salvaged for future fighting. If we were overrun the fighting would move to Clonninger.

And in my ear a few words about taking care of von Drachau. I said I would.

But we survived. I won't say we won because even though we managed to break the attack, we ourselves were decimated. JG Kill's effectiveness was ruined for the next week. For days we could barely manage regular patrols. Had we been hit again we'd've been obliterated.

That week McClennon three times requested permission to evacuate nonessential ground troops, received three refusals. Still, it seemed pointless for us to stay when our blocking screen had been riddled. Small herds were passing daily. Clonninger was under as much pressure as we and had more trouble handling it. Their defenses weren't meant to stand against whales. Their sailplanes often had to flee. Ground personnel crouched in deep bunkers and prayed the whales weren't so hungry they'd dig them out.

Whale numbers north of the Harridans were estimated at ten thousand and mantas at ten to twenty. Not vast, but overwhelming in concentration. Populations for the whole continent were about double

those, with the only other concentrations in the Sickie Islands. By the end of that week our experts believed a third of the Harridan whales had slipped past us. We'd downed about ten percent of those trying and about twenty-five percent of the mantas.

IX

A fog of despair enveloped Beadle. Derry had informed McClennon that there'd be no more reinforcements. They were needed further south. Permission to withdraw? Denied again. We had only one hundred twelve effective sailcraft. Ammunition was short. And the main blow was yet to fall. It's hard to capture the dulled sense of doom that clung so thick. It wasn't a verbal or a visible thing, though faces steadily lengthened. There was no defeatist talk. The men kept their thoughts to themselves-but couldn't help expressing them through actions, by digging deeper shelters, in a lack of crisp efficiency. Things less definable. Most hadn't looked for desperate stands when they signed on. And Camelot hadn't prepared them to face one. Till recently they'd experienced only a lazy, vacation sort of action, loafing and laughter with a faint bouquet of battle.

One evening Horst and I stood watching lightning shoot among the near pure copper peaks of the Harridans. "D'you ever look one in the eye?" he asked.

Memory of the manta I'd missed. I shuddered, nodded.

"And you don't believe they're intelligent?"

"I don't care. A burst in the guts is all that matters. That's cash money, genius or retard."

"Your conscience doesn't bother you?"

Something was bothering him, though I couldn't understand why. He wouldn't worry bending human beings, so why aliens? Especially when the pay's right and you're the son of a man who'd become rich by doing the same? But his reluctance wasn't unique. So many people consider alien intelligence sacred-without any rational basis. It's a crippling emotional weakness that has wormed its way into Confederation law. You can't exploit a world with intelligent natives. . . . But conscience may've had nothing to do with it. Seems, in hindsight, his reluctance might've been a rationalized facet of his revolt against his father and authority.

Understandably, Ubichi was sensitive to speculations about manta intelligence. Severe fines were laid on men caught discussing the possibility-which, human nature being what it is, made the talk more persistent. Several pilots, Horst included, had appealed to McClennon. He'd been sympathetic, but what could he have done?

And I kept wondering why anyone cared. I agreed with the Corporation. That may have been a defect in me.

*"If this thought truly occurred to del Gado at the time, it clearly made no lasting moral impression. News buffs will remember that he was one of several Ubichi mercenaries named in Confederation genocide indictments stemming from illegal exploitation on Bonaventure, though he was not convicted.

-Dogfight

As soon as we recovered from attack, for morale purposes we launched our last offensive, a pre-emptive strike against a developing manta concentration. Everything, including armed zeppelins, went. The mission was partially successful. Kept another attack from hitting Beadle for a week, but it cost. None of the airships returned. Morale sagged instead of rising. We'd planned to use the zepps in our withdrawal-if ever authorized.

In line of seniority I took command of my squadron after a manta made the position available. But I remained von Drachau's wing-man. That made him less impetuous. Still addicted to the flying, he avoided offending a man who could ground him. I was tempted. His eye was still deadly, but his concern over the intelligence of mantas had begun affecting his performance.

At first it was a barely noticeable hesitation in attack that more than once left blistered paint on his ship. With his timing a hair off he sometimes stalled close enough for a mania's bolt to caress his craft. My admonitions had little effect. His flying continued to deteriorate. And still I couldn't understand.

X

His performance improved dramatically six days after our strike into the Harridans, a day when he had no time to think, when the wing's survival was on the line and maximum effort was a must. (He always performed best under pressure. He never could explain how he'd brushed those nine mantas off me that day. He'd torn through them with the cold efficiency of a military robot, but later

couldn't remember. It was as if another personality had taken control. I saw him go through three such possessions and he couldn't remember after any.) It was a battle in which we all flew inspired-and earned a Pyrrhic victory. . .the back of the wing was broken, but again Beadle survived.

The mantas came at dawn, as before, and brought a whale herd with them. There'd been snow, but this time a hard night's work had cleared the catapults and sailships. We were up and waiting. They walked-or flew-into it. And kept coming. And kept coming.

And by weight of numbers drove us to ground. And once we'd lost the air the whales moved in. McClennon again called for aid from Clonninger. It came. We broke out. And soon were forced to ground again. The mantas refused to be dismayed. A river came across the Gap to replace losses. Clonninger signalled us for help. From Beadle we watched endless columns of whales, varicolored as species mixed, move down the dragline south. We could do nothing. Clonninger was on its own. McClennon ordered a hot air balloon loaded with phosphorous bombs, sent it out and blew it amidst the mantas crowding our launch gate. Horst and I jumped into their smoke. That entire mission we ignored mantas and concentrated on the whales, who seemed likely to destroy the net. Before ammunition ran out we forced them to rejoin the migration. But the mantas didn't leave till dark. Our ground batteries ran out of rockets. Half our ships were destroyed or permanently grounded. From frostbite as much as manta action (the day's high was -23° C.), a third of our people became casualties. Fourteen pilots found permanent homes in the bottom of Ginnunga Gap. Rescue balloons couldn't go after them.

Paradoxically, permission to withdraw came just before we lost contact with Clonninger. We began our wound-licking retreat at midnight, scabby remnants of squadrons launching into the ink of the Gap, grabbing the ups, then slanting down toward Clonninger. Balloons began dragging the line.

Clonninger was what we'd feared for Beadle: churned earth and bones ethereally grim by dawn light. The whales had broken its defenses without difficulty. Appetites whetted, they'd moved on. From three thousand meters the borders of the earth-brown river of devastation seemed to sweep the horizons. The silvery drag cable sketched a bright centerline for that death-path.

We were patrolling when the first airships came south. The skies were utterly empty, the ground naked, silence total. Once snow covered the route only memory would mark recent events. . . Days passed. The Clonninger story repeated itself down the cable, station after station, though occasionally we found salvageable survivors or equipment. Operations seemed ended for our ground units. But for us pilots it went on. We followed the line till we overtook straggler whales, returned to work.

As the migration approached Derry corporate defenses stiffened. Though we'd lost contact, it seemed our function at the Gap had been to buy time. True, as I later learned. A string of Beadle-like fortress-bases were thrown across the northern and Sickle Islands routes. But even they weren't strong enough. As the mantas learned (even I found myself accepting the intelligence proposition), they became more proficient at besieging and destroying bases. The whales grew less fearful, more driven by their mating urge. Mantas would herd them to a base; they'd wreck it despite the most furious defense. Both whales and mantas abandoned fear, ignored their own losses. JG XIII was out of the main action, of course, but we persevered-if only because we knew we'd never get off planet if Derry fell. But we flew with little enthusiasm. Each additional destroyed base or mine (whatever Ubichi was after had to be unearthed) reassured us of the inevitability of failure.

When a man goes mercenary in hopes of buying off, he undergoes special training. Most have a paramilitary orientation. (I use "mercenary" loosely.) Historical studies puzzled me. Why had men so often fought on when defeat was inevitable? Why had they in fact given more of themselves in a hopeless cause? I was living it then and still didn't understand. JG XIII performed miracles with what it had, slaughtered whales and mantas by the hundreds, and that after everyone had abandoned hope. . .

Horst reached the one fifty mark. I reached one hundred twenty. Almost every surviving pilot surpassed fifty kills. There were just thirty-three of us left.

XI

On the spur of the moment one day, based on two considerations, I made my first command decision: good winds during patrol and a grave shortage of supplies. For a month the wing had been living and fighting off the remnants of stations destroyed by migrating whales. Rations were a single pale meal each day. Our remaining ammunition was all with us on patrol.

When I began this I meant to tell about myself and Horst-Johann von Drachau. Glancing back, I see

I've sketched a story of myself and JG XIII. Still, it's almost impossible to extricate the forms - especially since there's so little concrete to say about the man. My attempts to characterize him fail, so robotlike was he even with me. Mostly I've speculated, drawn on rumor and used what I learned from Commander McClennon. The few times Horst opened at all he didn't reveal much, usually only expressing an increasing concern about the mantas. Without my speculations he'd read like an excerpt from a service file.

The above is an admonition to myself: don't digress into the heroism and privation of the month the wing operated independently. That wasn't a story about von Drachau. He endured it without comment. Yet sleeping in crude wooden shelters and eating downed manta without complaining might say something about the man behind the facade, or something about changes that had occurred there. Hard to say. He may've ignored privation simply because it didn't impinge on his personal problems.

We were in the air, making the last patrol we could reasonably mount. I had command. In a wild moment, inspired by good ups and winds, I decided to try breaking through to Derry territory. Without knowing how far it'd be to the nearest extant station-we hadn't seen outsiders since borrowing the Cloninger squadrons. That Derry still held I could guess only from the fact that we were still to its north and in contact with mantas and whales.

The inspiration hit, I wag-winged follow me and went into a long shallow glide. Derry itself lay over two hundred kilometers away, a long fly possible only if we flitted from up to up. Much longer flights had been made-though not against opposition.

It took twelve hours and cost eight sailcraft, but we made it. It was an ace day for everyone. There seemed to be a Horst-like despair about the mantas that left them sluggish in action. We littered the barren earth with their corpses. Horst, with seven kills, had our lowest score. Because I was behind him all the while I noticed he wasn't trying, shot only when a pilot was endangered. This had been growing during the month. He was as sluggish as the mantas.

Our appearance at Derry generated mixed reactions. Employees got a big lift, perhaps because our survival presented an example. But management seemed unsettled, especially by our kill claims, our complaints, and the fact that there were survivors they were obligated to rescue. All they wanted was to hold on and keep the mines working. But aid to JG XIII became an instant cause celebre. It was obvious there'd be employee rebellion if our survivors were written off.

I spent days being grilled, the price of arrogating command. The others were supposed to remain quarantined for debriefing, but evaded their watchers. They did the public relations job. Someone spread the tales that were the base for von Drachau's legend.

I tried to stop that, but to do so was beating my head against a wall. Those people in the shrinking Derry holding needed a hero-even if they had to make him up, to fill in, pad, chop off rough corners so he'd meet their needs. It developed quickly. I wonder how Horst would've reacted had he been around for deep exposure. I think it might've broken his shell, but would've gone to his head too. Well, no matter now.

Myself, I'd nominate Commander McClennon as the real hero of JG XIII. His was the determination and spirit that brought us through. But he was an administrator.

Much could be told about our stay at Derry, which lasted through winter and spring, till long after the manta processes of intellection ponderously ground to the conclusion that we humans couldn't be smashed and eaten this time. The fighting, of course, continued, and would till Confederation intervened, but it stayed at a modest level. They stopped coming to us. Morale soared. Yet things were really no better. The mating whales still cut us off from the south polar spaceport.

But the tale is dedicated to Horst-Johann von Drachau. It lasts only another week.

XII

Once free of interrogation, I began preparing the wing to return to action. For years I'd been geared to fighting; administration wasn't easy. I grew short-tempered, began hunting excuses to evade responsibility. Cursed myself for making the decision that'd brought me inside, even though that'd meant volunteer crews taking zepps north with stores.

An early official action was an interview with Horst. He came to my cubby-office sullen and dispirited, but cheered up when I said, "I'm taking you off attack. You'll be my wingman."

"Good."

"It means that much?"

"What?"

"This stuff about manta intelligence."

"Yeah. But you wouldn't understand, Sal. Nobody does."

I began my "what difference does it make?" speech. He interrupted.

"You know I can't explain. It's something like this: we're not fighting a war. In war you try to demonstrate superiority of arms, to convince the other side it's cheaper to submit. We're trying for extermination here. Like with the Sangaree."

The Sangaree. The race his father had destroyed. "No big loss."

"Wrong. They were nasty, but posed no real threat. They could've been handled with a treaty. We had the power."

"No tears were shed. . ."

"Wrong again. But the gut reaction isn't over. You wait. When men like my father and Admiral Beckhart and Commander McClennon and the other militarists who control Luna Command fade away, you'll start seeing a reaction. . . a whole race, Sal, a whole culture, independently evolved, with all it might've taught us. . ."

It had to be rationalization, something he'd built for himself to mask a deeper unhappiness.

"McClennon? You don't approve of him?"

"Well, yeah, he's all right. I guess. But even when he disagreed, he went along. In fact, my father never could've found the Sangaree homeworld without him. If he'd revolted then, instead of later when his actions turned and bit back. . . well, the Sangaree would be alive and he'd be off starfishing with Amy."

I couldn't get through. Neither could he. The speeches on the table were masks for deeper things. There's no way to talk about one thing and communicate something else. "Going along," I said.

"What've you been doing? How about the kid who squawks but goes along because he wants to fly?"

That's what we're all doing here, Horst. Think I'd be here if I could buy off any other way? Life is compromise. No exceptions. And you're old enough to know it."*

Shouldn't've said that. But I was irritable, unconcerned about what he'd think. He stared a moment, then stalked out, considering his own compromises.

Two days later my ships were ordered up for the first time since our arrival. Command had had trouble deciding what to do with us. I think we weren't employed because the brass were afraid we were as good as we claimed, which meant (by the same illogical process that built legends around Horst and the wing) that our survival wasn't just a miracle, that we'd really been written off but had refused to die. Such accusations were going around and Command was sensitive to them.

We went up as air cover for the rescue convoy bringing our survivors in from up the cable. We wouldn't've been used if another unit had been available. But the mantas had a big push on, their last major and only night offensive.

*Del Gado may indeed have said something of the sort at the time, and have felt it, but again, once the pressure was off, he forgot. He has been bought off for years, yet remains with Ubichi's Armed Action

Command. He must enjoy his work.

-Dogfight

Winds at Derry are sluggish, the ups are weak, and that night there was an overcast masking the moons. The aurora is insignificant that far south. Seeing was by lightning, a rough way to go. We launched shortly after nightfall, spent almost an hour creeping to altitude, then clawed north above the cable. Flares were out to mark it, but those failed us when we passed the last outpost. After that it was twenty-five ships navigating by guesswork, maintaining contact by staying headache-making alert during lightning flashes.

But it was also relaxing. I was doing something I understood. The whisper of air over my canopy lulled me, washed the week's aggravations away.

Occasionally I checked my mirrors. Horst maintained perfect position on my right quarter. The others spread around in ragged formation, yielding compactness and precision to safety. The night threatened collisions.

We found the convoy one hundred twenty kilometers up the line, past midnight, running slowly into the breeze and flashing signals so we'd locate them. I dropped down, signalled back with a bioluminescent lantern, then clawed some altitude, put the men into wide patrol patterns.

Everything went well through the night. The mantas weren't up in that sector.

Dawn brought them, about fifty in a flying circus they'd adopted from us. We condensed formation and began slugging it out.

They'd learned. They still operated in pairs, but no longer got in one another's way. And they

strove to break our pairs to take advantage of numbers. But when a pair latched onto a sailplane it became their entire universe. We, however, shot at anything, whether or not it was a manta against which we were directly engaged.

They'd overadopted our tactics. I learned that within minutes. When someone got half a pair, the other would slide out of action and stay out till it found a single manta of opposite sex. Curious. (Shortly I'll comment on the findings of the government investigators, who dug far deeper than Ubichi's exobiologists. But one notion then current, just rumor as the sentience hypothesis became accepted, was that manta intelligence changed cyclically, as a function of the mating cycle.)

We held our own. All of us were alive because we were good. Dodging bolts was instinctual, getting shells into manta guts second nature. We lost only two craft, total. One pilot. Two thirds of the mantas went down.

Horst and I flew as if attached to ends of a metal bar. Book perfect. But the mantas forced us away from the main fray, as many as twenty concentrating on us. (I think they recognized our devices and decided to destroy us. If it were possible for humans to be known to mantas, they'd've been Horst and I.) I went into a robotlike mood like Horst's on his high-kill days. Manta after manta tumbled away. My shooting was flawless. Brief bursts, maybe a dozen shells, were all I used. I seldom missed.

As sometimes happened in such a brawl, Horst and I found our stations reversed. A savage maneuver that left my glider creaking put me in the wingman slot. During it Horst scored his hundred fifty-eighth kill, clearing a manta off my back. Far as I know that was the only time he fired.

The arrangement was fine with me. He was the better shot; let him clear the mess while I protected his back. We'd resume proper positions when a break in the fighting came.

A moment later Horst was in firing position beneath a female who'd expended her bolt (it then took several minutes to build a charge). He bored in, passed so close their wings nearly brushed. But he didn't fire. I took her out as I came up behind.

The eyes. Again I saw them closely. Puzzlement and pain(?) as she folded and fell. . . Three times that scene repeated itself. Horst wouldn't shoot. Behind him I cursed, threatened, promised, feared. Tried to get shells into his targets, but missed. He maneuvered so I was in poor position on each pass.

Then the mantas broke. They'd lost. The rest of the squadron pursued, losing ground because the monsters were better equipped to grab altitude.

Horst went high. At first I didn't understand, just continued cursing. Then I saw a manta, an old male circling alone, and thought he'd gotten back in track, was going after a kill.

He wasn't. He circled in close and for a seeming eternity they flew wingtip to wingtip, eyeballing one another. Two creatures alone, unable to communicate. But something passed between them. Nobody believes me (since it doesn't fit the von Drachau legend), but I think they made a suicide pact. Flash. Bolt. Horst's ship staggered, began smoking. The death's-head had disappeared from his fuselage. He started down.

I put everything in my magazines into that old male. The explosions tore him to shreds.

I caught Horst a thousand meters down, pulled up wingtip to wingtip. He still had control, but poorly. Smoke filled his cockpit. Little flames peeped out where his emblem had been. The canvas was ripping from his airframe. By hand signals I tried to get him to bail out.

He signalled he couldn't, that his canopy was stuck. Maybe it was, but when McClennon and I returned a month later, after the migration had passed south, I had no trouble lifting it away. Maybe he wanted to die.

Or maybe it was because of his legs. When we collected his remains we found that the manta bolt had jagged through his cockpit and cooked his legs below the knees. There'd've been no saving him. Yet he kept control most of the way down, losing it only in the last five hundred meters. He stalled, spun, dove. Then he recovered and managed a low angle crash. He rolled nose over tail, then burned. Finis. No more Horst-Johann.

I still don't understand.*

*"Hawkins, you keep harping on the 'meaningl of Horsfs death. Christ, man, that's my point: it had no meaning. In my terms. By those he utterly wasted his life; his voluntary termination didn't alter the military situation one iota. Even in terms your readers understand it had little meaning. They're vicarious fighters; their outlooks aren't much different than mine-except they want my skin for taking a bite from their sacred cow. Horst was a self-appointed Christ-figure. Only in martyr's terms does his death have meaning, and then only to those who believe any intelligence is holy, to be cherished, defended, and allowed to follow its own course utterly free of external influence. What he and his ilk fail to understand is that it's right down deep-

streambed fundamental to the nature of OUT intelligence to interfere, overpower, exploit and obliterate. We did it to one another before First Expansion; we've done it to Toke, Ulantonid and Sangaree; we'll continue doing it.

"In terms of accomplishment, yes, he bought something with his life, An injunction against Ubichi operations on Camelot. There's your meaning, but one that makes sense only in an ethical framework most people won't comprehend. Believe me, I've tried. But I'm incapable of seeing the universe and its contents in other than tool-cattle terms. Now have the balls to tell me I'm in the minority." From a private letter by Salvador del Gado.

-Dogfight

XIII

According to the latest, the relationship between Manta and whale is far more complex than anyone at Ubichi ever guessed. (Guessed-Ubichi never cared. Irrked even me that at the height of Corporate operations, Ubichi had only one exobiologist on planet-a virologist-bacteriologist charged with finding some disease with which to infect the whales. Even I could appreciate the possible advantages in accumulation of knowledge.) At best, we thought, when the intelligence theory had gained common currency, the whales served as cattle for the mantas. . .

Not so, say Confederation's researchers. The mantas only appear to herd and control the whales. The whales are the true masters. The mantas are their equivalent of dogs, fleet-winged servants for the ponderous and poorly maneuverable. Their very slow growth of ability to cope with our aerial tactics wasn't a function of a cyclic increase in intelligence, it was a reflection of the difficulty the whales had projecting their defensive needs into our much faster and more maneuverable frame of reference. By means of severely limited control.

At the time it seemed a perfectly logical assumption that the mantas were upset with us because we were destroying their food sources. (They live on a mouse-sized parasite common amongst the forest of organs on a whale's back.) It seemed much more unlikely, even unreasonable, that the whales themselves were the ones upset and were sending mantas against us, because those were better able to cope, if a little too dull to do it well. The whales always carried out the attacks on our ground facilities, but we missed the hint there.

It seems the manta was originally domesticated to defend whales from a pterodactyl-like flying predator, one which mantas and whales had hunted almost to extinction by the time Ubichi arrived on Camelot. As humans and dogs once did with wolves. Until the government report we were only vaguely aware of the creatures. They never bothered us, so we didn't bother them.

The relationship between whales and mantas is an ancient one, one which domestication doesn't adequately describe. Nor does symbiosis, effectively. Evolution has forced upon both an incredibly complex and clumsy reproductive process that leaves them inextricably bound together.

In order to go into esterus the female manta must be exposed to prolonged equatorial temperatures. She mates in the air, in a dance as complex and strange as that of earthly bees, but only with her chosen mate. Somewhat like Terran marsupials, she soon gives birth to unformed young. But now it gets weird. The marsupial pouch (if such I may call it for argument's sake) is a specially developed semi-womb atop the back of a male whale. While instinct compels her to deposit her young there, the male whale envelopes the she-manta in a clutch of frondlike organs, which caress her body and leave a whitish dust-his "sperm". Once her young have been transferred, the female manta goes into a kind of travel-frenzy, like a bee flitting from flower to flower visiting all nearby whales. Any receptive female she visits will, with organs not unlike those of the male, stroke the "sperm" from her body.

Incredibly complicated and clumsy. And unromantic. But it works.

We never would've learned of it but for Horst-who, I think, had nothing of the sort in mind when he let that old manta bolt him down.

And that's about all there is to say. It's a puzzle story. Why did von Drachau do it? I don't know-or don't want to know-but I work under severe handicaps. I'm an Old Earther. I never had a father to play push-me pull-you with my life. I never learned to care much about anything outside myself. A meager loyalty to companions in action is the best I've ever mustered. But enough of excuses. The fighting with mantas continued four years after Horst's death, through several lesser migrations that never reached the mating grounds. Then a government inquiry board finally stepped in-after Commander McClennon and Fleet Admiral von Drachau had spent three years knocking on doors at Luna Command (Ubichi's wealth has its power to blind). Their investigations still aren't complete, but it seems they'll rule Camelot permanently off limits. So Horst did buy something with his life. Had he not died, I doubt the Commander would've gotten angry enough to act.

That he did so doesn't entirely please me, of course. I inherited his position. Though I pulled down a handsome income as JG Kill's wing leader and on-going top killer, I loathed the administrative donkey work. Still, I admire the courage he showed.

I also admire Horst, despite his shortcomings, despite myself. But he wasn't a hero, no matter what people want to hear me say. He was a snot-nosed kid used to getting his own way who threw a suicidal tantrum when he saw there was no other way to achieve his ends. . .

And that's it, the rolling down of the socks to expose the feet of clay. Believe the stories or believe his wingman. It's all the same to me. I've got mine in and don't need your approval. *

*Not true, in your editor's opinion. Especially in his private communications, del Gado seems very much interested in finding approval of things he has done. Perhaps he has a conscience after all. He certainly seems desperate to find justification for his life.

-Dogfight