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Title: Attrition

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Release date: January 14, 2008 [eBook #24282]
Most recently updated: January 3, 2021

Language: English

Credits: Produced by Greg Weeks, Stephen Blundell and the Online
Distributed Proofreading Team at <https://www.pgdp.net>

*** START OF THE PROJECT GUTENBERG EBOOK ATTRITION ***

ATTRITION

By JIM WANNAMAKER

Of course if Man is to survive, he must be adaptable, as any life form must. But that's not enough; he must adapt faster than the competing forms. And on new planets, that can be tricky....



Illustrated by Krenkel



HE faxgram read: REPORT MA IS INSTANTER GRAVIS. The news obelisk just off the express strip outside Mega Angeles' Galactic Survey Building was flashing: ONE OF OUR STAR SHIPS IS MISSING!

Going up in the lift, I recalled what I had seen once scrawled upon the bulkhead of a GS trainer: *Space is kind to those who respect her.* And underneath, in different handwriting: *Fear is the word, my boy.*

The look given me by the only other passenger, a husky youngster in GS gray, when I punched Interstel's level, didn't help. It was on the tip of my tongue to retaliate: *Yes, and I'd turn in my own mother if she were a star chaser and I caught her doing something stupid.* But I let it ride; obviously, it was a general-principles reaction; he couldn't have known the particulars of my last assignment: the seldom kind that had given Interstel its reputation.

The lumer over the main entrance glowed: INTERSTELLAR SECURITY, INVESTIGATION, AND SPECIAL SERVICES BRANCH, GALACTIC SURVEY, NORTH AMERICAN FEDERATION.

At the end of the long corridor between offices was a door labeled: CHIEF SPECIAL AGENT.

Gravis hadn't changed a bit in the thirty-six hours since I'd last seen him: a large, rumpled man who showed every year of the twenty he'd spent in Interstel.

"It's a nasty job, Ivy."

"Always has been," I said, completing the little interchange that had been reiterated so often that it had become almost a shibboleth.

I took advantage of his momentary silence. I'd had an hour during the air-taxi hop from Xanadu, the resort two hundred miles off the coast of California, to prepare my bitter statement. Words come fluently when an earned leave has been pulled peremptorily out from beneath you; a leave that still had twenty-nine days to go. But I was brief; the news flasher had canceled much of the bite of my anger; it took me something under one hundred and twenty seconds, including repetition of certain words and phrases.

Gravis lived up to his name; he didn't bat an eye. He handed me a thin folder; three of its sheets were facsimile extrapolations of probot reports; the fourth was an evaluation-and-assignment draft; all were from Galactic Survey Headquarters, NAF, in Montreal. The top three were identical, excepting probot serial numbers and departure and arrival times. GSS 231 had been located in its command orbit above a planet that had not yet been officially named but was well within the explored limits of the space sector assigned NAFGS by the interfederational body, had been monitored by three robot probes—described as being in *optimum mechanical condition*—on three distinctly separate occasions, and all devices that could be interrogated from outside had triggered *safe and secure*. But no human contact had been accomplished. The fourth sheet—which bore the calligraphy on its upper right corner: *Attention Callum*—assumed that the crew of 231, a survey team and con alternate, had met with an accident or series of accidents of undetermined origin and extent in the course of carrying out the duty described as *follow-up exploration* on the Earth-type planet, *herein and heretofore designated Epsilon-Terra*, and must therefore be considered—

"The news is—" I started to say.

"Pure delirium," Gravis interrupted. "Haven't you read Paragraph Six? We know exactly where the ship is because it's exactly where it should be. It's the crew that's missing."

Paragraph Seven concluded: *We therefore recommend that an agent of experience be dispatched soonest to the designated star system.*

"Experienced or expendable?" I muttered.

"Ivy, after ten years in Interstel, you should know that experience and expendability are synonymous."

Inside the GS section of the Lunar Complex, I had the occasion to think semantically again.

Words like *instantly* and *soonest* seldom match their literal meaning when applied to the physical transport of human beings, but in my job—I hadn't even had time to get my gee-legs.

I stepped off the glide strip in front of the ramp marked OUTGOING PERSONNEL, handed the efficient looking redhead my Q-chit and ID, and said: "Priority one."

"Quarantine, O.K.," she checked, smiling. "Feeling antiseptic?"

I had to admit, privately, that I did not. As applied to her, the term: *coveralls, regulation, gray* was strictly a euphemism. Perhaps it was the combination of low gravity and controlled conditions that made Lunatics of female persuasion blossom so anatomically. Or maybe she was a plant, a deliberate psych experiment to put outbound starmen in a particular frame of mind.

She flashed my identification on the screen, took a long look, and became coldly efficient. *Callum, Ivor Vincent. Age: 40. Height: 5'8". Weight: 142. Hair: brown. Eyes: green. Rank: Special Agent, Interstel.* "You look much older, Mr. Callum."

She consulted her assignment list.

"Lock Three."

I snapped the identoflake back in its bracelet, picked up my jump bag and briefing kit, and headed up the ramp, feeling more eyes than the redhead's. The anonymity of a GS working uniform hadn't lasted very long.

By the time I was able to capture enough breath to make coherent sounds, the shuttler was already approaching parking orbit. The pilot had used maximum grav boost, and the trip must have crowded the record.

"That wasn't exactly SOP, was it?"

"Priority one, sir," the youngster replied, showing teeth wolfishly.

I was still trying to think up an adequate rebuttal when I came out of the air lock and into the ship. Then I felt better. P 1 means, among other things, first available transportation—but this

giant was the newest type, crammed to the buffers with the results of science's latest efforts to make star *voyageurs* as safe as express-strip commuters inside a Terran dome. Even the vibrations of the great Gatch-Spitzer-Melnikov generators, building toward maximum output, had been dampened to a level more imaginary than tangible. Internal gravity was momentarily in operation, as an additional blessing; and, walking down the blue-lit corridor toward Astrogation, I could feel the occasional, metallic, thermal thump that meant the IP drive was hot and critical.

I got a second lift when I saw who was bending over the robopilot console: Antonio Moya, Mexico City's gift to Galactic Survey some thirty-five years earlier; a *café-con-leche* type with shrewd eyes, nervous hands, silver-streaked hair that showed a defiance of geriatric injections, a slight, wiry body that couldn't have gone more than one hundred and twenty pounds at 1.0 gee, and probably the best Master Spaceman extant. Only discipline kept the grin off my face. But he was on the horn, getting traffic clearance, so I didn't interrupt.

The others were unknowns, the sort characterized by old spacers as "pretty boy, recruitment ad types," but they looked competent; I figured a medic and a spread of ratings; counting Moya, a basic GS unit. I'd expected both a con crew and a standby. Either this was the total of available personnel, or the brass had decided not to risk more men than absolutely necessary. If I'd had illusions about the assignment, they would have faded at that instant.

It's this way in Interstel: you're taught to be a loner. You're expected to have absolute confidence in your own abilities and complete skepticism about the talents of others. You're supposed to be suspicious, cynical, courageous, and completely trustworthy. And you're not expected to have friends. Which, obviously, in the light of the aforementioned and part of what is yet to come, could serve as the definition of redundancy. You're required to weed out incompetents wherever you find them without prejudice, mercy, or feeling. The standing order is survival, yet you are expected to lay down your life gladly if the sacrifice will save one, pink-cheeked, short-time, assistant teamer who gives the barest suggestion that he might some day grow up to be a man and repay the thousands of credits squandered upon his training in that profound hope. Which, stated another way, has become the Eleventh Commandment of special agents: *Remember the body corporeal and keep it inviolate*; and, if the reaction of the rank-and-file of Galactic Survey to Interstel is used as criterion, is the best-kept secret in the explored, physical universe. "The agent's burden," Gravis calls it.

Moya's jaw dropped when he caught sight of me—apparently he had been told only to expect an agent—but he recovered quickly.

"Hello, Callum," he barked. "I won't say it's a pleasure. Stow your gear and strap down."

The claxon sounded stridently, and the inflectionless voice of the robopilot said: "Sixty seconds."

I got into the indicated gee couch and squirmed around seeking some measure of comfort. It had been designed for a much larger man, and I gritted my teeth in the expectation of taking a beating.

After a bruising few minutes, we went weightless, then the servos put us back on internal gravity, and the crew unstrapped.

They ignored me studiously; it wasn't entirely bad manners; there's plenty to be done in the interval prior to the first hop, and it isn't all in just checking co-ordinates and programming master con.

The usual space plan calls for several accelerations and a lot of distance between Terra-Luna proximity and Solar System departure. But Space Regs are disregarded on Priority One missions. So, for probably less than an hour, things were going to be busy in Astrogation.

I retrieved my kit and looked for an unoccupied cubicle.

GS star ships are designed to accommodate twenty-four men in reasonable comfort—a figure arrived at more historically—the sum of experience—than arbitrarily, as the minimum number necessary for the adequate exploration of a new star system.

It breaks down this way: six men to a team, four teams maximum; three for planetary grounding, one for ship's con; since any given team can do either task, they are interchangeable, who gets which depends upon rotation; three for exploration, then, because averages spread over several generations of interstellar capability bear out the fact that mother primaries generally possess no more than three planets that are in the least amicable to humans.

I was more than cursorily familiar with the drill. The basic requirement for Interstel is five years' service with a survey team. I'd spent nine. Which is another reason for general GS enmity: the turncoat syndrome. That and the fact that prospective agents are not even considered unless they rate in the top one per cent in service qualification and fitness reports: the jealousy angle. I'd known Moya from my last regular duty ship. I'd worked up from assistant under his tutelage. I'd been ready for the Team Co-ordinator/Master Spaceman exams when I'd applied for transfer. Moya had raged for hours. But he'd given me a first-rate recommendation. Call it service pride.

I was just getting a start on the vid tapes when the cubicle's panel dilated and Moya stamped in, bristling like a game cock.

"What's all this about Epsilon-Terra?"

I removed the ear bead and grinned at him.

"Hello, Tony, you old space dog! You're looking fine. What happened? Did they pull you off leave, too?"

He held the acid face until the panel closed, then he brightened a little. At least, he didn't refuse my proffered hand.

He stood fists on hips, glaring at me.

Finally, he growled: "I had hopes you'd wash out. When I heard you'd made it, I was plenty disappointed." He shook his head. "You seem healthy enough, but I still think it's a waste of a good spacer." And that, apparently, was as close as he was going to come to saying that he was glad to see me again, because, in the next breath, he reverted to Starship Master.

"Now, let's have the nexus. All I know is that I got orders to round up a short crew, was handed a space plan with co-ordinates that were originally filed for GSS 231 a few months back, with an ultimate destination of a planet I orbited five years ago."

"You've been there?"

"I just said so, didn't I? Don't they teach you vacuum cops to listen?"

I gave him the background.

He nodded soberly a couple of times, but his only comment was: "I heard rumors." Then he said: "That's all I've got time for now. We make our first jump shortly. That'll take us to where 231 went on GSM. From there on out, we follow her plan precisely."

"Until we locate and grapple, Tony, then we start making our own mistakes."

"I don't doubt that."

Moya moved to leave, paused, said over his shoulder: "What's this about old Ben Stuart being cashiered for misconduct?"

"It's true."

His back stiffened and his hands clenched. He turned to face me again. "I went through the Academy with Ben. How about doing me a favor? For old times sake. Tell me who it was that put the finger on him. Just give me a name. I might spot it sometime on a register."

I figured there was no sense prolonging the agony.

"O.K. Ivor Vincent Callum."

Moya's face blanched; he took a backward step and uttered something under his breath that sounded like the Spanish equivalent of—

He turned abruptly, opened the panel, and stalked out.

Somehow I expected him to come back and ask for details, but he didn't show.

I won't dwell on the trip. Any schoolboy who watches tridee space operas can quote chapter and verse and use phrases like "paraspaces" and "rip-psyche phenomenon" as trippingly as "Hey, Joey, let's play swap-strip!" Citizens from Venus and Mars, vacationing on Terra, speak knowingly, too, whenever they can bring themselves to cease complaining about the gravity, crowded conditions, and regimentation, and can squelch the bragging about how well they're doing on good old whatever. But don't let them kid you. GSM drive is restricted to *interstellar* transport. Colonists from the nearer systems are picked people, stiff-backed pioneers, who don't sob to come "home" every time their particular planet completes a circuit around its primary; and, when they do return, they're generally too busy lobbying for essentials to bother telling tall tales. So, comparatively few people are really familiar with star ships and the ins and outs of paraspaces. Ask a starman, you won't have any trouble recognizing one, even in mufti; or, better yet, get a spool labeled: "THE CONQUEST OF PARASPACE: A History of the Origins and Early Application of Star Drive." It's old, but good, and it was written especially for laymen.



I'll say this: it took about a week. Sure paraspace hops are, to all intents and purposes, instantaneous, but there is a limit to the capacity of the GSM drive, and regulations restrict the jumps to a toleration well within that capacity. We might have made it sooner had we not been bound to follow 231's space plan—but not much. Once a plan has been filed, only an emergency can justify deviation. So, if you'll pardon the expression, let's just say that interstellar distances are astronomical.

Every time we came back into objective space—and I'd managed to recapture my soul—I applied myself to the tapes.

I got little from Moya, and not because of enmity. Even after refreshing his memory, he couldn't offer much. Although he had been master of the ship that had first remarked E-T, he hadn't set foot upon its surface.

The planet was comparatively undistinguished.

It was about the size of Melna-Terra, had an atmosphere with a good balance of nitrogen and oxygen, plus carbon dioxide, argon, et cetera, was mostly surface water, yet offered polar ice caps and a reasonable land area, as taken in the aggregate, although present in the form of scattered, insular masses. The largest of these, about half the size of Terra's Australia, was a comfortable number of degrees above the equator and had been selected as representative for detailed examination. Briefly: standard terrain—a balance between mountains, desert, and plain; flora, varied; fauna, primitive—plenty of insect life, enough to keep an entomologist occupied for years, but not much for specialists in the other branches of zoölogy; warm-blooded creatures comparatively rare; and, according to the original survey team, nothing bacterial that had overburdened Doc Yakamura's polyvalent vaccine; the kind of planet that pleased Galactic Survey because it looked promising for future colonization, come the day and the need.

"The type that skeptics like me view with grave suspicion," I told Moya. "Like saints, women of unblemished reputation, heroes, politicians—"

"And all Interstel agents," Tony offered dryly.

In the interim, since the divulgence of my part in the Stuart affair, Moya had thawed somewhat. After all, he and I had been friends at one time, and the present situation held no brief for head-on, personality clashes. The phrase "all in the same boat" applies with particular meaning to spacers. Tony undoubtedly figured that 231 might have been his ship. He even went so far as to express an interest in seeing E-T from the ground level.

"I work alone, Tony," I said. "But thanks for the offer. Tell you what: I'll strike a compromise. If I get into serious trouble, it'll be you I shout for. All right?"

Moya scowled. "Probably a wild goose chase anyway."

But he said it without enthusiasm.

It reads like this: regs require that messenger vehicles be returned to the Solar System on their miniature equivalents of paraspace drive, periodically, with complete information as to conditions

encountered, work in progress, et cetera. None had been received from 231. There's a joke—not at all funny, I'll admit—that concerns itself with just this situation. It ends with the opening lines of the GS Memorial Service.

The last skull work I did was to familiarize myself with the personal dossiers of each of 231's crew, paying particular attention to psych reports. It's a part of my job that I've never liked. But I recognize the necessity.

The crew seemed fairly typical. The average was relatively inexperienced, the sort you'd expect on the type of assignment that was often used as advanced training. I managed to single out several possibles—men who might crack, depending upon the gravity of the situation. The captain-designate wasn't one of them; nor was the survey-team co-ordinator.

GSS 231 was on station—big and reflective and innocently ominous, held methodically by robopilot in an orbit that matched exactly the rotation of Epsilon-Terra—precisely over the largest land mass.

Moya conned us in like a dream, paralleled, rectified, grappled, and mated locks.

I showed up in Astrogation in a full-pressure suit, carrying the helmet.

The crew gawked, and somebody snickered.

"You think it's silly, do you?" Moya snapped.

"Better flush your side as soon as I get clear," I advised.

Moya nodded, lowered and secured the helmet, checked lines, and rapped O.K.

An hour later, I still didn't feel silly. I had the helmet open now. I sat in front of the communications console.

Moya responded as if he had been waiting with his finger on the stud. I didn't have to specify taping; all star ship radio traffic is automatically recorded.

"Level O.K.?" I asked.

"Yes, man; what's the story?"

"Inner lock and all compartments: air pressure, density, temperature, and purity optimum; all intrinsic gear optimum; three shuttler berths vacant; hold shows standard environmental equipment for one team gone; messenger racks full, no programming apparent; absolutely no sign of crew; repeat—"

"I got it; have you checked the log?"

"Who's doing this, you or me?"

I figured they could edit Moya's comment.

The log was strictly routine—space plan had been followed exactly; arrival had been on schedule; survey team had been dispatched with minimum delay, had reported grounding and camp establishment without incident, had relayed particulars of commencement of operation—until the last entry. It was eerie listening to the emotionless voice of 231's skipper: "Sub-entry one. Date: same. Time: 2205 Zulu. No contact with base camp. Surface front negates visual. Am holding dispatch of M 1. Will wait until next scheduled report time before action."

There was no sub-entry two.

I broke the recorder seal, reversed and played back the comm tapes. There wasn't much. Distance obviates any talky-talky from ship to base once the Solar System has been cleared. What I learned was simply a substantiation of what I'd already surmised. I cut off when I heard a familiar voice say: "250 from 231."

Moya helped me strip off the pressure suit. No matter what the physio manuals say, there's room for improvement. Nothing beats your own skin.

He trailed me into the gear compartment.

I returned the suit to its clips and began sorting through the welter of what the well-dressed spacer wears for a bug rig somewhere near my size. The tag is not completely adequate. It's a light-weight outfit, with intrinsic filters and auds, designed to be worn under conditions that involve the suspected presence of dangerous bacteria or harmful gases. Its efficacy does not extend beyond the limits of reasonable atmosphere.

"Now don't start jumping to conclusions," I told Moya. "All I know is that whatever happened happened quickly and down below."

From the weapons' chest, I selected a little W&R 50 and the biggest clip I could find. "Fifties" aren't much for range, but they are unconditionally guaranteed to make a creature the size of a Triceratops think twice before heading in your direction again, and, once you strap one on, you

never feel the weight. That's why, even though they are officially obsolete, you can generally find a brace in most star ship arsenals.

"Remind me to report the maintenance gang of this hunk for stocking unauthorized weaponry."

"You would, too," Moya said.

On the way back to the lock, I told him:

"Let's save time by not making a duplicate recording. I'll transmit additional information and intent going down. There's one shuttler left in 231, so I'll use it. If I find I need something that isn't in the shuttler, I'll fetch myself. Under no circumstances are you or any of your boys to leave this ship without my say-so."

"What happens if—?"

"You've had thirty years of deep space, Tony; am I supposed to tell you your job? Go by the book. Either launch another messenger and sit tight for instructions, or get out and risk a board inquiry, depending."

"You can rot down there for all of me."

"Thanks a pile. Make certain your crew understands. I wouldn't want any of them getting their pretty hands dirty."

But I didn't feel so cocky going down. I hadn't the least idea of what to expect. Sure, I'd gleaned something from the comm tapes: the unsuccessful attempts to contact the survey team at base camp; the happy-go-lucky report from the kid sent in shuttler II to investigate, saying that the camp was deserted but everything looked fine, just fine; the unsuccessful attempts to recontact him; and then a blank except for my own voice. Apparently, the skipper had followed with the rest of the con crew. I could even guess why he had failed to make additional entries in the log, or not transmitted from the camp in lieu thereof. He figured it was something he could work out himself, and he didn't want anything on record to show that he had broken regulations. He wanted to keep the errors of personnel under his command—and his own—in the family. He figured, after the situation was resolved, that he could make cover entries and nobody's slate would be soiled.

The camp was at the edge of a plain marked "Hesitation" on the chart.

I plucked a scrap of verse out of my mind:

*On the Plains of Hesitation
Bleach the bones of countless millions
Who, when victory was dawning
Sat down to rest
And resting, died.*

I wondered how prophetic that was going to be.

I grounded within yards of the other three shuttlers. They were parked neatly parallel. Their orderliness made my scalp prickle, and I was sweating long before I got into the bug suit, squeezed out of the tiny lock, and set foot on Epsilon-Terra.

The sky was blue, naked except for a tracing of tenuous clouds.

I could see neither of the star ships.

I wonder if you can imagine how it feels to be on a planet so far away from the Solar System that the term "trillions of miles" is totally inadequate? If you can grasp even a bit of it, then add the complication of a small but insistent voice inside your head that keeps telling you that no matter where or how far you go, you're not—

Let's just say it gives your sweat an odor and your mouth a taste and makes you want to look over your shoulder all the time.

I walked the hundred yards to the white plastidome, avoiding the few bulbous plants and tussocks of short yellow grass that dotted the dry plain.

Through the aud cells of the suit's hood, I could hear the light buzzing of insects that served only to heighten the overbearing quiet of the area.

The port was closed. Inside, everything was correct, except for the little dirt brought in on boot soles during erection and subsequent goings and comings.

There was a packet of nutratabs, lying open on an empty crate that had been pressed into service as a table. Some one had fortified himself before trekking off into the nearby bush. There was much equipment still sealed in cartons. Bunks were made up. Tucked under the blanket of one was a little book with stylus attached. All pages were blank except the first. The entry read: "TC in a sweat to get going. Rain potential. No rest for the weary. This seems to be a nice spot though. Am kind of eager myself to take a look at some of the vegetation hereabouts. Have several ideas along the lines of Thompson's prelim research concerning extraction of—"

I replaced it under the blanket. I was ready to give odds that each of the previous finders had done the same: the kid that had arrived in shuttler II, and probably 231's skipper; and each from the same motive—*He'll be back; after all, a diary is a personal thing.*

I went back outside, shut the port, and made a complete circuit of the camp. I looked into each of the three shuttlers. I found nothing that could offer the least positive clue to the fate of the twelve men from 231.

I returned to shuttler IV, beamed Moya, and filled him in, forcing myself to be cheery.

"How's everything upstairs?"

"Right now we're having a little zero-gee drill; keeps the boys alert."

"Good idea. Now here's my plan: I've got ten hours of daylight left, so I'm heading out into the bush. Figure departure in five minutes. Weather has obscured signs, but I don't think I can go wrong by following my nose and taking the shortest route. I'm traveling light, just the bug rig, the W&R, belt kit, and a minicomm. I'm going to set up this transceiver to record and transmit on command-response. I suggest you interrogate every hour on the hour from now on. Catchum?"

I broke off, made the necessary adjustments, strapped the minicomm on my wrist, and exited the shuttler.

The antiseptic air that I drew into my lungs was beginning to seem inadequate, I felt slippery all over, and there was a cottony taste in my mouth.

I made it to the start of the bush in fifteen minutes. Don't be misled into picturing jungle. There was a variety of vegetation, including trees, but none of it was what you'd call heavy going. Beyond somewhere was a stream, significant enough to be noted on the chart as "First Water." And several miles from the camp was the start of a series of rolling hills. Blue in the distance was a chain of mountains—"The Guardians." The over-all impression was of peaceful, virgin wilderness.

The original survey team had made its camp in the relative frankness of the plain, then, after preliminary tests, had moved to higher ground, specifically, the lee side of one of the nearer hills.

They had cleared an area, using heat sweepers to destroy encroaching vegetation, and R-F beams to disenchant the local insect population.

Insects there were: a regular cacophony of buzzings, chirpings and monotonous mutterings. By the time I'd reached the bank of the stream, I'd lost track of individual varieties.

The stream was a bare trickle; the bed was spongy and dotted with tall, spare plants that resembled horse tails; I negotiated the fifty feet to the opposite bank without difficulty.

I threaded through a thicket and came out into a brief expanse of savannah.

There I found the first evidence of the fate of 231's people.

It was a small object, oval, flattened, the color of old ivory.

Although I hadn't been walking along with my head under my arm, it took me a moment to tumble to what I'd discovered.

Then my hair tried to stand on end. I rid myself of it and used the minicomm for the first time.

Speaking to a recorder was altogether too impersonal for what I had to report.

"I've just found a patella; a human knee-cap. I'm about a hundred feet beyond the far bank of the stream in almost a straight line from the camp. I'm in grass about two feet tall. I'm casting about now, looking—Hold it. Yes, it's scraps of a gray uniform. More remains. Here's a femur; here's a radius-ulna. The bones are clean, scattered. Evidence of scavengers. No chance for a P-M on this one."

I got out the chart from its case on the suit's belt, x'd the location, and went on, feeling more lonely all the time.

It wasn't that I was unconversant with the physical evidence of death. I've marked corpses on planets you've probably never heard of—corpses resulting from disaster, unavoidable accident, stupid error, and even murder. What I've learned is that you never get used to coming face to face with human death, even when its manifestation is the inscrutable vacancy of bare bones.

You can put this down, too, and think what you want about incongruity: I was angry; angry with the spacer that had got himself catapulted into eternity so far from home; angry with myself for having assumed before leaving the Interstel office in Mega Angeles that this is what I would find; angry because the assumption had done nothing to prepare me for the reality. No space padre would have admired what I said inside the bug suit's hood—nor the refinements that grew more bitter with each new discovery.

Within three hours, I'd accounted for all twelve of 231's missing crew.

The search had led to and beyond the hillside where the original team had made its second and

permanent camp. In one place, I found enough to separate four skeletons of men who had fallen within a few feet of each other. The rest were randomly located. There was a small plant growing up through the hole in the left half of a pelvis. Somehow it looked obscene, and I had to fight the impulse to tear it out. But it was simply one of many, struggling for survival, that I'd seen growing here and there throughout the area: a species that seemed to bear a familial kinship to those that sprinkled the plain.

There was equipment: field kits, a minilab, a couple of blasters, each showing full charge.

Cause of death: that was the enigma.

"So far I'm stumped," I said into the minicomm. "I've retrieved a few scraps of uniform bearing stains. Maybe analysis can discover something. The tapes say that E-T's birds and mammals are comparatively rare, but *comparative* doesn't mean much in the light of what I've seen. So far, though, everything I can come up with seems totally inadequate. Bacterial invasion, animal attack, insect incursion—none were problems with the first survey gang, so why should they be now? Rule out gas poisoning or allied concomitants; the suit tab shows white. Speaking of that—I'm peeling now. Keep your fingers crossed."

The air was warm and still, heavy with the ubiquitous smells and sounds of wilderness.

I was in the approximate area of the first team's camp. As per custom, they had struck the plastidome, dismantled the scanners, power panels, and other reusable equipment, and destroyed the debris of occupancy. The clearing had repaired itself. But for the slight concavities on the hilltop that marked shuttler settlements, there was little to indicate their previous presence.

I sat down and waited.

The suicide complex has never been a part of my psyche, but there are times when you have to place yourself in jeopardy; it's occupational, and I've got the gray hair, worry lines, and scars to prove it.

I waited for three long hours.

The sweat dampness of my uniform evaporated only to be replaced by the stains of new perspiration. I sucked in great gulps of E-T's air and found it consistently comfortable in my lungs. Insects came, investigated, and retreated, mostly because of urging. I was not approached by anything larger than a line of creatures the size of Vici-Terran militants, and I was able to avoid them by evasive action. As far as I could determine, I wasn't invaded by anything microscopic or sub-microscopic either, because at the end of the three hours, I felt nothing beyond the personal infirmities that I'd brought with me.

The definite decline of E-T's sun forced me to give up.

The walk back to the plain wasn't entirely fruitless; I found something that I'd overlooked previously: the scattered remains of a small vertebrate. Many of the bones were missing.

"What happened to you?" I mused. "Did you come for a meal and got killed by a larger animal? Or were you caught in the same disaster that—?"

There was no way to tell.

What was it about Epsilon-Terra that could accept one survey team for months of occupancy—occupancy that had involved detailed examination of the region within miles of the plain and the hillside, and cursory examination of thousands of square miles of the rest of the insular mass by air, including touchdowns at key points for short stays—and that five years later could entice, enmesh, and destroy the entire complement of a modern star ship, indiscriminately, within a matter of hours?

It was late afternoon when I reached the camp.

I was tired, dirty, thirsty, hungry, and thoroughly frustrated.

I drank from a previously unopened water bowser and wolfed several nutratabs.

Then I stumbled over to the shuttler, secured the recorder and interrogation setup, raised the star ship, and brought Moya up to date.

"I'm going to move this vehicle to the hillside and spend the night there. I figure I'd better give E-T a full twenty-six hour rotation interval to come up with something before the next step. Tomorrow, I'm going to need a man down here to witness the location and disposition of the corpses. You know the drill. It's your decision whether they should be identified singly, if possible, and secured for removal to Terra, or whether they should be interred here, commonly. My recommendation is to make a film record and plant them, but I'm too tired to argue. One thing more: whoever you send—if he gives me any lip, I'll cut him down like a small tree. There's been enough mistakes made here already."

I spent the night in the shuttler. Call it an atavistic response to the unknowns of darkness.

It was a restless interval between dusk and dawn.

Occasionally, I illuminated the hillside and surrounding area. A couple of times, I glimpsed the eye reflections of small animals. They seemed to possess the shyness of most nocturnal creatures. But I couldn't help wondering—

Morning dawned gloomily; there was a light mist hanging over the streambed, and much of the sky was turgid with clouds.

I gave the star ship the go-ahead and specified dispatch because of the threatening weather.

Moya mentioned plastibags, a filmer, and a porto-digger. His decision was obvious. I figured it wise but had the uncomfortable picture of a GS representative trying to explain the reasons to bereaved relatives.

I spent a few moments going over meteorological details. As I recalled from the tapes, this was the rainy season. Judging from the look of the area, it could use precipitation. Things were growing, but the stream was mostly dry, and the plain seemed parched. Apparently the mountains blocked much of it.

Sitting on hands has never been my delight, so I exited the shuttler and went down the hill for another look-see.

Insects buzzed noisily; the air seemed heavy and oppressive; but nothing had changed—there was no evidence of the creatures I'd seen during the night.

It took about an hour for the shuttler from 250 to show.

In the interval, several things happened.

The first was a perceptive darkening of the sky, followed by a light, preliminary shower. I'd anticipated that, and was considering heading back for the bug suit when the second occurred.



I'm not going to offer excuses. From the advantage of retrospection, you can say what you want about slipshod detective work. The point remains that I'd covered the area more than cursorily and had not encountered anything specifically dangerous.

The timing was pure luck.

The shuttler penetrated the overcast about ten miles off target, located, and started its approach. And something bit me on the leg.

I pulled up my pant's leg immediately, hoping to catch the culprit, but saw nothing save a thin red line about an inch long. It looked more a scratch than an insect bite. But I hadn't brushed against anything.

The shuttler grounded on the hilltop, and I headed up.

Perhaps it was exertion that speeded the reaction.

There was no pain, only a local numbness.

Before I'd traveled ten yards, my leg from the knee almost to the ankle felt prickly asleep.

I paused and looked. There was no swelling, no other discoloration.

I heard a raspy voice from the hilltop.

"Are you going to give me some help, or do I have to haul all this gear myself?"

Despite the leg, I didn't know whether to laugh or explode.

Moya was rattling around in an outsized bug suit and carrying the biggest Moril blaster contained in a star ship's arsenal that could still be called portable.

"What in condemned space are you doing here?" I shouted.

I was ready to give it to him right off the top of the regs about the relationship between ship's master and agents-on-assignment and the responsibilities of command, but the leg chose that moment to fail. Until then, I hadn't really been worried. I fell forward against the pitch of the slope, caught myself with my arms, and rolled over on my back. I hit my left thigh with my fist and felt absolutely nothing. Massage didn't help.

I heard Moya panting down the brow of the hill.

"Keep away!" I shouted. "Get back to the ship!"

Moya bent over me; he had opened the hood of the bug suit, and his face was grave.

"What's the trouble, Callum?"

"Can't you take orders?"

He shook his head. I pointed to the leg. He looked swiftly at the broken skin.

"How does it feel?"

"That's the trouble; it doesn't."

He grabbed my arm, put it over his shoulder, and got me on my feet.

We made good time, considering.

"Too bad you're such a shrimp," I said.

"I can take you on any time."

Shuttler IV was closest, parked on a shelf fifty yards below the top of the hill, but Moya was heading to miss it.

"I programmed for auto, just in case, and the generators are up to power. We waste time to save time. That way I can give you some help on the ascent."

The generator part was fine; the rest wasn't.

It started to rain again, just before we reached 250's shuttler.

I put my face up to it.

Moya got me through the lock and onto an acceleration couch. Then he headed for the panel. I was beginning to feel a desperate weakness, but my head was still clear.

"Wait a minute," I said. "What's your gee tolerance?"

"High, but—"

"So strap me and raise this couch to vertical. Then override the auto and take us up fast."

He blinked.

"Listen," I said. "This feels like a neuro-toxin. Remember snake-bite aid? Well, the numbness is up to my groin now. No place for a tourniquet. And nothing here for freezing."

It was strange going up. I blacked out almost immediately, but Moya took it flat and apparently stayed alert all the way.

"Space!" I managed to gasp finally. "Any more of that sort of thing and I'd have ended up stupid."

Then there was utter confusion.

I came to full awareness under the luminescence of the infirmary's overhead. I was naked on the padding of the table. I could see a respirator off to my right, and a suction octopus near it. The medic was just stowing an auto-heart. But for a different tingling in my leg and an all-is-lost sensation south of my diaphragm, I felt reasonably sound.

The medic approached. I hadn't gotten a very good impression of the lean, blond youngster on the trip out, but now he seemed Hippocrates, Luke, Lister, Salk, O'Grady, and Yakamura all rolled into one.

He weakened it by asking the classic redundancy.

"How do you feel?"

I elbowed up for a look at the leg. There was a series of little welts the length of it, masked by forceheal.

"Where did you learn your trade?" I asked. "In a production expediter's office?"

He grinned.

"It took more than three hours, Mr. Callum. Suction, flushing, full transfusion. You've got some good blood in you now."

I lay back and let him talk.

"There'll be nerve damage, probably. Regeneration should take care of most of it, but you might need transplants. You were lucky. First, that whatever nipped you barely broke the skin. Second, that the skipper was there to help. And third, that you had the sense to block the spread of the toxin by gee forces."

"Yeah. Remind me to thank Moya—immediately after I write him up for leaving his station."

The medic looked pleased.

"Well, now, the way I got it—and I believe the recorder will bear me out—is that you requested a witness. You left it up to the skipper to make the selection."

He cleared his throat.

"And, by the way, Moya said he'd look in on you after a bit. The thing to do now is rest."

I sat up again.

"Where're my clothes?"

The kid commenced noises of disapproval.

"Damnation! I'm not going anywhere. I just want to look over that pant's leg."

Came the dawn.

"What'd you say Moya was doing?"

"Oh, I expect he's busy up forward."

The trouble was that he looked me straight in the eye. It takes practice to lie convincingly. And the Space Academy doesn't list the Art of Prevarication among its curricula.

"That misbegotten little son of an Aztec! He went back down, didn't he?"

I tried to jackknife off the table.

The medic flexed his muscles and said: "I can't take the responsibility—"

"When are you people going to get it through your stubborn heads that the responsibility for this whole shebang is mine and mine alone?"

Two more of the crew showed up. Under other circumstances, I might have enjoyed tangling with them. I know tricks that even the inventors of karate overlooked.

"All right," I gasped. "But give me the dope. He's not alone, is he? Are you in contact?"

It developed that Moya had returned to the site of the disaster immediately upon learning that I was out of danger. He'd taken a crewman. He was also equipped with my chart of the area complete with locales of the remains. The last word had been that the two had grounded and that the weather front was dissipating. He'd been gone about two hours.

"They both had bug suits," the medic offered.

"Great," I said. "Just splendid. Suppose there's a creature down there that can go through plastic like—"

For the first time the three lost their smug expressions.

"We destroyed your clothes," the medic said sheepishly. "We figured—"

I railed at them for a couple of minutes, but it was mostly unfair. Moya's decision could be justified, too.

They rustled up a uniform and helped me to Astrogation. The remaining crewman was at the comm. The freeze was beginning to wear off, and my leg burned.

I alternated between berating myself and trying to think up an adequate explanation for the possible death or injury of two men ostensibly under my control.

After several hours of sweat-agony, Moya's voice came over the horn. He sounded tired.

"We've done it. You'll be happy to know that we gave them an official burial."

I could picture the little Mexican, standing beside the long mound, head bowed, with the Specter probably staring over his shoulder, going methodically through the complete Memorial Service, ending with: *And the whole galaxy is the sepulcher of illustrious men.*

"It's not much of a place, but the sun is shining now. Expect us shortly."

"Are you *sure* you're all right?"

I was propped on my elbows on the bunk in my cubicle, nursing the jangle in my leg. Maybe it was that—but I was as confused as a mouse in a psych maze.

"Why wouldn't I be?" Moya said.

"And you wore the suits all the time?"

"Affirmative. If you'd done the same—"

The medic showed with lab analyses.

"There wasn't much of that stuff in you," he said. "And I can't break it down. Too complex. You used the cobra venom analogy—Well, this makes that look as simple as mother's milk."

He held up the stained pieces of uniform. Moya had kept his wits about him.

"A combination of weather, soil, et cetera," the medic said. "Completely innocuous."

"About the toxin," I said. "Given time, could you work up an antivenin?"

"Probably. But I'd need plenty. Both time and toxin." He looked at me. "Oh, I see what you're getting at." He became professionally parochial.

"In other words—" I said.

He snapped his fingers.

"You know how it hit you."

The confusion persisted, so I allowed the medic to use a pressure hypo.

Hours later, I felt better—physically.

On the vid screen, the magnified surface of the insular mass seemed almost to beckon. *Sireni*, I thought.

Little remained of the weather front. Over the area of the plain and the rolling hills were meager wisps of clouds. Darkness again was creeping across the face of E-T.

"That storm didn't amount to much," Moya said.

Storm, I thought. *Rain*.

"I know what I'd do," Moya continued. "I'd radiate and have done with it."

The medic dissented on clinical-curiosity grounds.

"I can't reconcile things yet," I said. "But let's assume that it was a tragedy of errors. Let's say that what hit me, killed them. But what was it? Where did it come from? And why? No, I'll have to go down again. It's my burden to find *all* the answers."

Moya growled: "There's a time for stubbornness."

I caught the rest of the crew staring at me; their expressions were a motley.

Back at the same old stand, open for business, looking at the pitiful alteration, feeling lonely, feeling vulnerable, too, despite the bug suit, Moya's parting blast still burning in my mind.

He'd ferried me down to the hilltop in the long shadows of early morning. I'd had to order him to return to the star ship. I stood now beside the communal mound. Moya had said, pointing down the hill, anger making him illogical: "These are the people you sold out when you transferred to Interstel. They could have used your kind of brains. Post-mortems aren't going to help them, now."

It was simple, wasn't it?

Something on E-T was a killer: quick and deadly.

If it got any sort of clean shot at you—

Something visible. Something big enough to make a mark. And not static, like a thorn. A ground crawler? My pant's legs had been tucked securely into my boot tops. A flier? It would have to be strong enough to pierce a GS uniform and make an entrance into flesh. Or to leave a scratch from a glancing blow. And I hadn't seen anything.

But only a recent problem.

And restricted to the area beyond the stream.

And random.

And terribly innocent. Innocent enough to be overlooked until it was too late.

Think.

I thought and came up with a brainful of nothing.

Think again.

Strong enough to pierce two thicknesses of cloth—It must have gone entirely through, although the overzealousness of the crew had removed any possibility of proof.

How about the bug suit?

Assume the plastic was protection enough—

Wouldn't the wearer notice a blow? Or hear something?

I'd felt but not heard.

But then the rain had been falling.

No insect had hit me forcibly before—

Moya and his helper had noticed nothing after—

A few meager drops of rain, sibilantly soaking into the eager soil of Epsilon-Terra.

Whoever first mouthed that bit about cursing being the audible manifestation of a mediocre mind completely missed the point.

There's something infinitely comforting in the crackle and sweep and roll of heartfelt invective.

I left the site of the common grave and made it back to the hillside and shuttler IV as fast as discretion and terrain and my game leg would allow.

"I *am* thinking," Moya grumbled over the comm. "If these details are so important, why—?"

"Don't blame Interstel," I said. "The tapes were put together by GS headquarters."

"Well, whoever. They should have included more information."

"Thompson," I prodded.

"Sure, sure, I remember him. Big, awkward, slow-moving—always babbling about plants."

"What kind?"

"*All* kinds."

"But anything particular? Something that he wanted to extract something from."

"Well, let's see—He brought back lots of sample specimens, but there *was* one that he played with all the way home. It was an insectivorous or carnivorous species, as I recall—"

"Yes? Yes?"

"That produced a chemical he thought might prove useful if it could be extracted and concentrated or synthesized—Now, hold on. Are you trying—?"

"Why not? And why didn't you mention this sooner?"

"For the simple reason—What got you off on this tangent?"

"*Rain*. The kid's diary said '*rain* potential.' The captain's log mentioned a *surface weather front*. And it *rained* just before I was hit."

"I fail to see the connection. But think about this: It rained on the survey team I ferried here, too—not often, but more than once or twice—and nothing happened to them."

That was the trouble with firing off at half thrust.

But there was still this nagging conviction: rain plus vegetation equals death.

I could picture Moya and the crew speculating that I'd taken complete leave of my senses.

But sometimes you have to play the game blindly—"by the seat of your pressure suit," as the pioneers stated it.

I went to the shuttler's locker, located a canteen in a survival kit, filled it and left the ship.

I started where I'd found the largest collection of remains.

Moya's memory had failed to particularize the plant, but I had enough evidence to negate indiscriminate baptism.

I felt supremely foolish—for a while.

My thoughts began to focus, and I recalled the little plant that had grown up through the hole in the pelvis.

Casting about, I located adult specimens. They seemed to fit the requirements. Again it struck me that they bore a familial kinship to a variety that occurred on the plain.

I couldn't place the difference.

Finally I selected one about two feet tall.

It was bulbous, thick skinned, terminating in broad members that were clustered to form a rough funnel. Their inner surfaces were coated with a glutinous substance. The main body of the plant was studded with warty projections about the size of walnut halves. And just below the terminal funnel was a corona of tapering members like leaves beneath a bizarre blossom. They ended in sharp points, bore flimsy surface bristles, and seemed to serve as protection for the trap.

I prodded the green-and-yellow mottled skin of the thing. It was tough, resistant, almost pneumatic—

I had this sudden, strong feeling.

About ten feet away was a tree with dull-reddish, overlapping bark segments on its trunk. There was a branch close enough to the ground to be reached if my leg would support the necessary spring. I tested the leg for leap and the branch for support. They held.

I uncapped the canteen and sprinkled the remaining water over the plant, making sure that some reached both the funnel and the corona.

I ran.

Seconds later, perched monkey-see, monkey-do on the branch, I lost any lingering feeling of foolishness.

I sat there for quite a while, sickened. I thought about the crew of 231, and the other pieces of the puzzle. One of them had to be arrogance—the natural arrogance of picked people that leads to a belief in corporeal immortality: *Nothing can happen to me; you, maybe, but not me.*

Even though I knew exactly what to expect, it was impossible not to jerk back involuntarily with the others.

We were in the star ship, clustered around a bell jar. The jar contained a small specimen of the killer that I'd dug up gingerly and brought back for evidence.

I'd introduced water into the jar, and the first reaction had just taken place.

"Watch closely," I cautioned.

Again it happened—innocently at first and then too swiftly for the eye to follow. One of the little protuberances seemed to swell slightly—*Ping*. Something struck the wall of the bell jar hard enough to evoke a clear, sharp, resonant note.

"I don't know the exact range of a mature specimen," I said, grimly, "but I saw leaves shake a good twenty yards away."

"A seed," one of the crewmen breathed. "Nothing but a tiny, insignificant *seed*."

Moya shook his head.

"A deadly missile, son, wearing or containing a virulent poison. And people used to blather about curare."

I began to draw concentric arcs on the chart.

"I kept fetching water and testing and retreating all the way back to the plain. Pretty soon there's not going to be any place safe within miles of where these mutants can take root. Near the plain's camp, they're still innocuous—the original species. The propagation response is triggered by rain, all right, but the seeds just pop out, and, of course, the poison is undoubtedly weak—a bother only to insects."

"But they weren't a problem—" Moya interjected.

"Time," I said. "Five years. Look here on the chart. I figured this to be the center: the first team's permanent camp on the hill. Now what happened there? Heaters to destroy immediate vegetation, and *Radio-Frequency* beams to kill insects and their larvae over a wider area. R-F—don't you see? Cells react to certain portions of the radio spectrum. Some are destroyed, depending upon intensity. Some behave strangely—the 'marching protozoa,' the 'dancing amoeba.' In others, chromosomal aberrations occur, resulting in mutations. Remember the experiments with yeasts, garlic, grains? The growth of some microorganisms is stimulated by R-F irradiation."

"Then these glorified flytraps got mad at what was happening to their innards and decided to

fight even harder for survival?"

"You're anthropomorphizing," I told Moya, "but that's the way I see it. They just responded along already established lines."

I paused and noted the expressions on the faces of the crew. Maybe it was that, and maybe it was the fact that my leg hadn't held up very well under the beating I'd given it. And maybe it was twelve good men—Anyway, I spent the next half hour pulling no punches. When I'd finished, Interstel had regained its reputation. Nobody—neither short-timer nor veteran—likes to hear dead comrades characterized as "stupid." But I figured the crew would remember.

Moya seemed unfazed, as if he'd paid scant attention to my speech; he rubbed his chin reflectively.

"The bug suits—"

"Were they any protection? At long range, probably. But up close—"

Moya apparently could think of nothing more to say.

We radiated the danger area, left 231 for a pick-up team, and headed for home.

Moya walked with me from Quarantine to the Terra Ramp. The leg still wasn't right.

"Did you mention me kindly in your report?"

"Of course not," I told him.

He chuckled and put his hand on my shoulder.

"About Ben Stuart—"

"It's a nasty job," I said.

"Did he rate getting cashiered?"

"He did, Tony."

"Well, take care of yourself, Ivy."

The redhead again was on duty at the outbound desk. She ignored me.

Xanadu!

It was night, and there was a heavy fog. Standing alone on the open promenade outside the dome, I was grateful that I couldn't see the sky—and the ominous stars that were not so far away.

A couple of months later, I heard that Epsilon-Terra had received its official name: *Atri-Terra*. *Atri* from attrition. I've wondered ever since whether GS based the choice upon the secular or the theological definition.

THE END

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