

The Project Gutenberg eBook of Control Group

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at www.gutenberg.org. If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: Control Group

Author: Roger D. Aycock

Release date: March 29, 2008 [eBook #24949]

Language: English

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

*** START OF THE PROJECT GUTENBERG EBOOK CONTROL GROUP ***

"Any problem posed by one group of human beings can be resolved by any other group." That's what the Handbook said. But did that include primitive humans? Or the Bees? Or a ...

CONTROL GROUP

By ROGER DEE

THE cool green disk of Alphard Six on the screen was infinitely welcome after the arid desolation and stinking swamplands of the inner planets, an airy jewel of a world that might have been designed specifically for the hard-earned month of rest ahead. Navigator Farrell, youngest and certainly most impulsive of the three-man Terran Reclamations crew, would have set the *Marco Four* down at once but for the greater caution of Stryker, nominally captain of the group, and of Gibson, engineer, and linguist. Xavier, the ship's little mechanical, had—as was usual and proper—no voice in the matter.

"Reconnaissance spiral first, Arthur," Stryker said firmly. He chuckled at Farrell's instant scowl, his little eyes twinkling and his naked paunch quaking over the belt of his shipboard shorts. "Chapter One, Subsection Five, Paragraph Twenty-seven: *No planetfall on an unreclaimed world shall be deemed safe without proper—*"

Farrell, as Stryker had expected, interrupted with characteristic impatience. "Do you *sleep* with that damned Reclamations Handbook, Lee? Alphard Six isn't an unreclaimed world—it was never colonized before the Hymenop invasion back in 3025, so why should it be inhabited now?"

Gibson, who for four hours had not looked up from his interminable chess game with Xavier, paused with a beleaguered knight in one blunt brown hand.

"No point in taking chances," Gibson said in his neutral baritone. He shrugged thick bare shoulders, his humorless black-browed face unmoved, when Farrell included him in his scowl. "We're two hundred twenty-six light-years from Sol, at the old limits of Terran expansion, and there's no knowing what we may turn up here. Alphard's was one of the first systems the Bees took over. It must have been one of the last to be abandoned when they pulled back to 70 Ophiuchi."

"And I think *you* live for the day," Farrell said acidly, "when we'll stumble across a functioning dome of live, buzzing Hymenops. Damn it, Gib, the Bees pulled out a hundred years ago, before you and I were born—neither of us ever saw a Hymenop, and never will!"

"But I saw them," Stryker said. "I fought them for the better part of the century they were here, and I learned there's no predicting nor understanding them. We never knew why they came nor why they gave up and left. How can we know whether they'd leave a rear-guard or booby trap here?"

He put a paternal hand on Farrell's shoulder, understanding the younger man's eagerness and

knowing that their close-knit team would have been the more poorly balanced without it.

"Gib's right," he said. He nearly added *as usual*. "We're on rest leave at the moment, yes, but our mission is still to find Terran colonies enslaved and abandoned by the Bees, not to risk our necks and a valuable Reorientations ship by landing blind on an unobserved planet. We're too close already. Cut in your shields and find a reconnaissance spiral, will you?"

Grumbling, Farrell punched coordinates on the Ringwave board that lifted the *Marco Four* out of her descent and restored the bluish enveloping haze of her repellors.

Stryker's caution was justified on the instant. The speeding streamlined shape that had flashed up unobserved from below swerved sharply and exploded in a cataclysmic blaze of atomic fire that rocked the ship wildly and flung the three men to the floor in a jangling roar of alarms.

"So the Handbook tacticians knew what they were about," Stryker said minutes later. Deliberately he adopted the smug tone best calculated to sting Farrell out of his first self-reproach, and grinned when the navigator bristled defensively. "Some of their enjoinders seem a little stuffy and obvious at times, but they're eminently sensible."

When Farrell refused to be baited Stryker turned to Gibson, who was busily assessing the damage done to the ship's more fragile equipment, and to Xavier, who searched the planet's surface with the ship's magnoscanner. The *Marco Four*, Ringwave generators humming gently, hung at the moment just inside the orbit of Alphard Six's single dun-colored moon.

Gibson put down a test meter with an air of finality.

"Nothing damaged but the Zero Interval Transfer computer. I can realign that in a couple of hours, but it'll have to be done before we hit Transfer again."

Stryker looked dubious. "What if the issue is forced before the ZIT unit is repaired? Suppose they come up after us?"

"I doubt that they can. Any installation crudely enough equipped to trust in guided missiles is hardly likely to have developed efficient space craft."

Stryker was not reassured.

"That torpedo of theirs was deadly enough," he said. "And its nature reflects the nature of the people who made it. Any race vicious enough to use atomic charges is too dangerous to trifle with." Worry made comical creases in his fat, good-humored face. "We'll have to find out who they are and why they're here, you know."

"They can't be Hymenops," Gibson said promptly. "First, because the Bees pinned their faith on Ringwave energy fields, as we did, rather than on missiles. Second, because there's no dome on Six."

"There were three empty domes on Five, which is a desert planet," Farrell pointed out. "Why didn't they settle Six? It's a more habitable world."

Gibson shrugged. "I know the Bees always erected domes on every planet they colonized, Arthur, but precedent is a fallible tool. And it's even more firmly established that there's no possibility of our rationalizing the motivations of a culture as alien as the Hymenops—we've been over that argument a hundred times on other reclaimed worlds."

"But this was never an unreclaimed world," Farrell said with the faint malice of one too recently caught in the wrong. "Alphard Six was surveyed and seeded with Terran bacteria around the year 3000, but the Bees invaded before we could colonize. And that means we'll have to rule out any resurgent colonial group down there, because Six never had a colony in the beginning."

"The Bees have been gone for over a hundred years," Stryker said. "Colonists might have migrated from another Terran-occupied planet."

Gibson disagreed.

"We've touched at every inhabited world in this sector, Lee, and not one surviving colony has developed space travel on its own. The Hymenops had a hundred years to condition their human slaves to ignorance of everything beyond their immediate environment—the motives behind that conditioning usually escape us, but that's beside the point—and they did a thorough job of it. The colonists have had no more than a century of freedom since the Bees pulled out, and four generations simply isn't enough time for any subjugated culture to climb from slavery to interstellar flight."

Stryker made a padding turn about the control room, tugging unhappily at the scanty fringe of hair the years had left him.

"If they're neither Hymenops nor resurgent colonists," he said, "then there's only one choice remaining—they're aliens from a system we haven't reached yet, beyond the old sphere of Terran exploration. We always assumed that we'd find other races out here someday, and that they'd be as different from us in form and motivation as the Hymenops. Why not now?"

Gibson said seriously, "Not probable, Lee. The same objection that rules out the Bees applies to any trans-Alphardian culture—they'd have to be beyond the atomic fission stage, else they'd never have attempted interstellar flight. The Ringwave with its Zero Interval Transfer principle and instantaneous communications applications is the only answer to long-range travel, and if they'd had that they wouldn't have bothered with atomics."

Stryker turned on him almost angrily. "If they're not Hymenops or humans or aliens, then what in God's name *are* they?"

"Aye, there's the rub," Farrell said, quoting a passage whose aptness had somehow seen it through a dozen reorganizations of insular tongue and a final translation to universal Terran. "If they're none of those three, we've only one conclusion left. There's no one down there at all—we're victims of the first joint hallucination in psychiatric history."

Stryker threw up his hands in surrender. "We can't identify them by theorizing, and that brings us down to the business of first-hand investigation. Who's going to bell the cat this time?"

"I'd like to go," Gibson said at once. "The ZIT computer can wait."

Stryker vetoed his offer as promptly. "No, the ZIT comes first. We may have to run for it, and we can't set up a Transfer jump without the computer. It's got to be me or Arthur."

Farrell felt the familiar chill of uneasiness that inevitably preceded this moment of decision. He was not lacking in courage, else the circumstances under which he had worked for the past ten years—the sometimes perilous, sometimes downright charnel conditions left by the fleeing Hymenop conquerors—would have broken him long ago. But that same hard experience had honed rather than blunted the edge of his imagination, and the prospect of a close-quarters stalking of an unknown and patently hostile force was anything but attractive.

"You two did the field work on the last location," he said. "It's high time I took my turn—and God knows I'd go mad if I had to stay inship and listen to Lee memorizing his Handbook subsections or to Gib practicing dead languages with Xavier."

Stryker laughed for the first time since the explosion that had so nearly wrecked the *Marco Four*.

"Good enough. Though it wouldn't be more diverting to listen for hours to you improvising enharmonic variations on the *Lament for Old Terra* with your accordion."

Gibson, characteristically, had a refinement to offer.

"They'll be alerted down there for a reconnaissance sally," he said. "Why not let Xavier take the scouter down for overt diversion, and drop Arthur off in the helihopper for a low-level check?"

Stryker looked at Farrell. "All right, Arthur?"

"Good enough," Farrell said. And to Xavier, who had not moved from his post at the magnoscanner: "How does it look, Xav? Have you pinned down their base yet?"

The mechanical answered him in a voice as smooth and clear—and as inflectionless—as a 'cello note. "The planet seems uninhabited except for a large island some three hundred miles in diameter. There are twenty-seven small agrarian hamlets surrounded by cultivated fields. There is one city of perhaps a thousand buildings with a central square. In the square rests a grounded spaceship of approximately ten times the bulk of the *Marco Four*."

They crowded about the vision screen, jostling Xavier's jointed gray shape in their interest. The central city lay in minutest detail before them, the battered hulk of the grounded ship glinting rustily in the late afternoon sunlight. Streets radiated away from the square in orderly succession, the whole so clearly depicted that they could see the throngs of people surging up and down, tiny foreshortened faces turned toward the sky.

"At least they're human," Farrell said. Relief replaced in some measure his earlier uneasiness. "Which means that they're Terran, and can be dealt with according to Reclamations routine. Is that hulk spaceworthy, Xav?"

Xavier's mellow drone assumed the convention vibrato that indicated stark puzzlement. "Its breached hull makes the ship incapable of flight. Apparently it is used only to supply power to the outlying hamlets."

The mechanical put a flexible gray finger upon an indicator graph derived from a composite section of detector meters. "The power transmitted seems to be gross electric current conveyed by metallic cables. It is generated through a crudely governed process of continuous atomic fission."

Farrell, himself appalled by the information, still found himself able to chuckle at Stryker's bellow of consternation.

"*Continuous fission?* Good God, only madmen would deliberately run a risk like that!"

Farrell prodded him with cheerful malice. "Why say mad *men*? Maybe they're humanoid aliens who thrive on hard radiation and look on the danger of being blown to hell in the middle of the

night as a satisfactory risk."

"They're not alien," Gibson said positively. "Their architecture is Terran, and so is their ship. The ship is incredibly primitive, though; those batteries of tubes at either end—"

"Are thrust reaction jets," Stryker finished in an awed voice. "Primitive isn't the word, Gib—the thing is prehistoric! Rocket propulsion hasn't been used in spacecraft since—how long, Xav?"

Xavier supplied the information with mechanical infallibility. "Since the year 2100 when the Ringwave propulsion-communication principle was discovered. That principle has served men since."

Farrell stared in blank disbelief at the anomalous craft on the screen. Primitive, as Stryker had said, was not the word for it: clumsily ovoid, studded with torpedo domes and turrets and bristling at either end with propulsion tubes, it lay at the center of its square like a rusted relic of a past largely destroyed and all but forgotten. What a magnificent disregard its builders must have had, he thought, for their lives and the genetic purity of their posterity! The sullen atomic fires banked in that oxidizing hulk—

Stryker said plaintively, "If you're right, Gib, then we're more in the dark than ever. How could a Terran-built ship eleven hundred years old get *here*?"

Gibson, absorbed in his chess-player's contemplation of alternatives, seemed hardly to hear him.

"Logic or not-logic," Gibson said. "If it's a Terran artifact, we can discover the reason for its presence. If not—"

"Any problem posed by one group of human beings," Stryker quoted his Handbook, *"can be resolved by any other group, regardless of ideology or conditioning, because the basic perceptive abilities of both must be the same through identical heredity."*

"If it's an imitation, and this is another Hymenop experiment in condition ecology, then we're stumped to begin with," Gibson finished. "Because we're not equipped to evaluate the psychology of alien motivation. We've got to determine first which case applies here."

He waited for Farrell's expected irony, and when the navigator forestalled him by remaining grimly quiet, continued.

"The obvious premise is that a Terran ship must have been built by Terrans. Question: Was it flown here, or built here?"

"It couldn't have been built here," Stryker said. "Alphard Six was surveyed just before the Bees took over in 3025, and there was nothing of the sort here then. It couldn't have been built during the two and a quarter centuries since; it's obviously much older than that. It was flown here."

"We progress," Farrell said dryly. "Now if you'll tell us *how*, we're ready to move."

"I think the ship was built on Terra during the Twenty-second Century," Gibson said calmly. "The atomic wars during that period destroyed practically all historical records along with the technology of the time, but I've read well-authenticated reports of atomic-driven ships leaving Terra before then for the nearer stars. The human race climbed out of its pit again during the Twenty-third Century and developed the technology that gave us the Ringwave. Certainly no atomic-powered ships were built after the wars—our records are complete from that time."

Farrell shook his head at the inference. "I've read any number of fanciful romances on the theme, Gib, but it won't stand up in practice. No shipboard society could last through a thousand-year space voyage. It's a physical and psychological impossibility. There's got to be some other explanation."

Gibson shrugged. "We can only eliminate the least likely alternatives and accept the simplest one remaining."

"Then we can eliminate this one now," Farrell said flatly. "It entails a thousand-year voyage, which is an impossibility for any gross reaction drive; the application of suspended animation or longevity or a successive-generation program, and a final penetration of Hymenop-occupied space to set up a colony under the very antennae of the Bees. Longevity wasn't developed until around the year 3000—Lee here was one of the first to profit by it, if you remember—and suspended animation is still to come. So there's one theory you can forget."

"Arthur's right," Stryker said reluctantly. "An atomic-powered ship *couldn't* have made such a trip, Gib. And such a lineal-descendant project couldn't have lasted through forty generations, speculative fiction to the contrary—the later generations would have been too far removed in ideology and intent from their ancestors. They'd have adapted to shipboard life as the norm. They'd have atrophied physically, perhaps even have mutated—"

"And they'd never have fought past the Bees during the Hymenop invasion and occupation," Farrell finished triumphantly. "The Bees had better detection equipment than we had. They'd have picked this ship up long before it reached Alphard Six."

"But the ship wasn't here in 3000," Gibson said, "and it is now. Therefore it must have arrived at

some time during the two hundred years of Hymenop occupation and evacuation."

Farrell, tangled in contradictions, swore bitterly. "But why should the Bees let them through? The three domes on Five are over two hundred years old, which means that the Bees were here before the ship came. Why didn't they blast it or enslave its crew?"

"We haven't touched on all the possibilities," Gibson reminded him. "We haven't even established yet that these people were never under Hymenop control. Precedent won't hold always, and there's no predicting nor evaluating the motives of an alien race. We never understood the Hymenops because there's no common ground of logic between us. Why try to interpret their intentions now?"

Farrell threw up his hands in disgust. "Next you'll say this is an ancient Terran expedition that actually succeeded! There's only one way to answer the questions we've raised, and that's to go down and see for ourselves. Ready, Xav?"

But uncertainty nagged uneasily at him when Farrell found himself alone in the helihopper with the forest flowing beneath like a leafy river and Xavier's scouter disappearing bulletlike into the dusk ahead.

We never found a colony so advanced, Farrell thought. Suppose this is a Hymenop experiment that really paid off? The Bees did some weird and wonderful things with human guinea pigs—what if they've created the ultimate booby trap here, and primed it with conditioned myrmidons in our own form?

Suppose, he thought—and derided himself for thinking it—one of those suicidal old interstellar ventures *did* succeed?

Xavier's voice, a mellow drone from the helihopper's Ringwave-powered visicom, cut sharply into his musing. "The ship has discovered the scouter and is training an electronic beam upon it. My instruments record an electromagnetic vibration pattern of low power but rapidly varying frequency. The operation seems pointless."

Stryker's voice followed, querulous with worry: "I'd better pull Xav back. It may be something lethal."

"Don't," Gibson's baritone advised. Surprisingly, there was excitement in the engineer's voice. "I think they're trying to communicate with us."

Farrell was on the point of demanding acidly to know how one went about communicating by means of a fluctuating electric field when the unexpected cessation of forest diverted his attention. The helihopper scudded over a cultivated area of considerable extent, fields stretching below in a vague random checkerboard of lighter and darker earth, an undefined cluster of buildings at their center. There was a central bonfire that burned like a wild red eye against the lower gloom, and in its plunging ruddy glow he made out an urgent scurrying of shadowy figures.

"I'm passing over a hamlet," Farrell reported. "The one nearest the city, I think. There's something odd going on down—"

Catastrophe struck so suddenly that he was caught completely unprepared. The helihopper's flimsy carriage bucked and crumpled. There was a blinding flare of electric discharge, a pungent stink of ozone and a stunning shock that flung him headlong into darkness.

He awoke slowly with a brutal headache and a conviction of nightmare heightened by the outlandish tone of his surroundings. He lay on a narrow bed in a whitely antiseptic infirmary, an oblong metal cell cluttered with a grimly utilitarian array of tables and lockers and chests. The lighting was harsh and overbright and the air hung thick with pungent unfamiliar chemical odors. From somewhere, far off yet at the same time as near as the bulkhead above him, came the unceasing drone of machinery.

Farrell sat up, groaning, when full consciousness made his position clear. He had been shot down by God knew what sort of devastating unorthodox weapon and was a prisoner in the grounded ship.

At his rising, a white-smocked fat man with anachronistic spectacles and close-cropped gray hair came into the room, moving with the professional assurance of a medic. The man stopped short at Farrell's stare and spoke; his words were utterly unintelligible, but his gesture was unmistakable.

Farrell followed him dumbly out of the infirmary and down a bare corridor whose metal floor rang coldly underfoot. An open port near the corridor's end relieved the blankness of wall and let in a flood of reddish Alphardian sunlight; Farrell slowed to look out, wondering how long he had lain unconscious, and felt panic knife at him when he saw Xavier's scouter lying, port open and undefended, on the square outside.

The mechanical had been as easily taken as himself, then. Stryker and Gibson, for all their professional caution, would fare no better—they could not have overlooked the capture of Farrell and Xavier, and when they tried as a matter of course to rescue them the *Marco* would be struck down in turn by the same weapon.

The fat medic turned and said something urgent in his unintelligible tongue. Farrell, dazed by the enormity of what had happened, followed without protest into an intersecting way that led through a bewildering succession of storage rooms and hydroponics gardens, through a small gymnasium fitted with physical training equipment in graduated sizes and finally into a soundproofed place that could have been nothing but a nursery.

The implication behind its presence stopped Farrell short.

"A *creche*," he said, stunned. He had a wild vision of endless generations of children growing up in this dim and stuffy room, to be taught from their first toddling steps the functions they must fulfill before the venture of which they were a part could be consummated.

One of those old ventures *had* succeeded, he thought, and was awed by the daring of that thousand-year odyssey. The realization left him more alarmed than before—for what technical marvels might not an isolated group of such dogged specialists have developed during a millennium of application?

Such a weapon as had brought down the helicopter and scouter was patently beyond reach of his own latter-day technology. Perhaps, he thought, its possession explained the presence of these people here in the first stronghold of the Hymenops; perhaps they had even fought and defeated the Bees on their own invaded ground.

He followed his white-smocked guide through a power room where great crude generators whirred ponderously, pouring out gross electric current into arm-thick cables. They were nearing the bow of the ship when they passed by another open port and Farrell, glancing out over the lowered rampway, saw that his fears for Stryker and Gibson had been well grounded.

The *Marco Four*, ports open, lay grounded outside.

Farrell could not have said, later, whether his next move was planned or reflexive. The whole desperate issue seemed to hang suspended for a breathless moment upon a hair-fine edge of decision, and in that instant he made his bid.

Without pausing in his stride he sprang out and through the port and down the steep plane of the ramp. The rough stone pavement of the square drummed underfoot; sore muscles tore at him, and weakness was like a weight about his neck. He expected momentarily to be blasted out of existence.

He reached the *Marco Four* with the startled shouts of his guide ringing unintelligibly in his ears. The port yawned; he plunged inside and stabbed at controls without waiting to seat himself. The ports swung shut. The ship darted up under his manipulation and arrowed into space with an acceleration that sprung his knees and made his vision swim blackly.

He was so weak with strain and with the success of his coup that he all but fainted when Stryker, his scanty hair tousled and his fat face comical with bewilderment, stumbled out of his sleeping cubicle and bellowed at him.

"What the hell are you doing, Arthur? Take us down!"

Farrell gaped at him, speechless.

Stryker lumbered past him and took the controls, spiraling the *Marco Four* down. Men swarmed outside the ports when the Reclamations craft settled gently to the square again. Gibson and Xavier reached the ship first; Gibson came inside quickly, leaving the mechanical outside making patient explanations to an excited group of Alphardians.

Gibson put a reassuring hand on Farrell's arm. "It's all right, Arthur. There's no trouble."

Farrell said dumbly, "I don't understand. They didn't shoot you and Xav down too?"

It was Gibson's turn to stare.

"No one shot you down! These people are primitive enough to use metallic power lines to carry electricity to their hamlets, an anachronism you forgot last night. You piloted the helicopter into one of those lines, and the crash put you out for the rest of the night and most of today. These Alphardians are friendly, so desperately happy to be found again that it's really pathetic."

"*Friendly?* That torpedo—"

"It wasn't a torpedo at all," Stryker put in. Understanding of the error under which Farrell had labored erased his earlier irritation, and he chuckled commiseratingly. "They had one small boat left for emergency missions, and sent it up to contact us in the fear that we might overlook their settlement and move on. The boat was atomic powered, and our shield screens set off its engines."

Farrell dropped into a chair at the chart table, limp with reaction. He was suddenly exhausted, and his head ached dully.

"We cracked the communications problem early last night," Gibson said. "These people use an ancient system of electromagnetic wave propagation called frequency modulation, and once Lee and I rigged up a suitable transceiver the rest was simple. Both Xav and I recognized the old

language; the natives reported your accident, and we came down at once."

"They really came from Terra? They lived through a thousand years of flight?"

"The ship left Terra for Sirius in 2171," Gibson said. "But not with these people aboard, or their ancestors. That expedition perished after less than a light-year when its hydroponics system failed. The Hymenops found the ship derelict when they invaded us, and brought it to Alphard Six in what was probably their first experiment with human subjects. The ship's log shows clearly what happened to the original complement. The rest is deducible from the situation here."

Farrell put his hands to his temples and groaned. "The crash must have scrambled my wits. Gib, where *did* they come from?"

"From one of the first peripheral colonies conquered by the Bees," Gibson said patiently. "The Hymenops were long-range planners, remember, and masters of hypnotic conditioning. They stocked the ship with a captive crew of Terrans conditioned to believe themselves descendants of the original crew, and grounded it here in disabled condition. They left for Alphard Five then, to watch developments.

"Succeeding generations of colonists grew up accepting the fact that their ship had missed Sirius and made planetfall here—they still don't know where they really are—by luck. They never knew about the Hymenops, and they've struggled along with an inadequate technology in the hope that a later expedition would find them. They found the truth hard to take, but they're eager to enjoy the fruits of Terran assimilation."

Stryker, grinning, brought Farrell a frosted drink that tinkled invitingly. "An unusually fortunate ending to a Hymenop experiment," he said. "These people progressed normally because they've been let alone. Reorienting them will be a simple matter; they'll be properly spoiled colonists within another generation."

Farrell sipped his drink appreciatively.

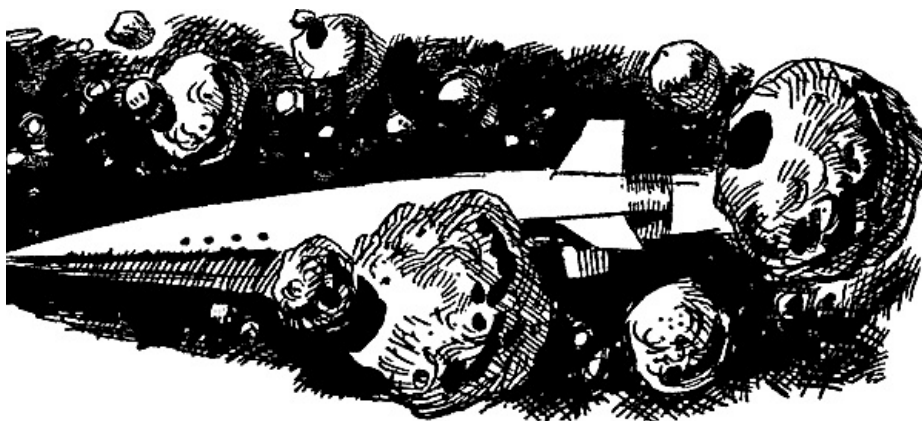
"But I don't see why the Bees should go to such trouble to deceive these people. Why did they sit back and let them grow as they pleased, Gib? It doesn't make sense!"

"But it does, for once," Gibson said. "The Bees set up this colony as a control unit to study the species they were invading, and they had to give their specimens a normal—if obsolete—background in order to determine their capabilities. The fact that their experiment didn't tell them what they wanted to know may have had a direct bearing on their decision to pull out."

Farrell shook his head. "It's a reverse application, isn't it of the old saw about Terrans being incapable of understanding an alien culture?"

"Of course," said Gibson, surprised. "It's obvious enough, surely—hard as they tried, the Bees never understood us either."

THE END



Transcriber's Note:

This etext was produced from *Amazing Science Fiction Stories* January 1960. Extensive research did not uncover any evidence that the U.S. copyright on this publication was renewed. Minor spelling and typographical errors have been corrected without note.

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE
THE FULL PROJECT GUTENBERG LICENSE
PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase “Project Gutenberg”), you agree to comply with all the terms of the Full Project Gutenberg™ License available with this file or online at www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg™ electronic works

1.A. By reading or using any part of this Project Gutenberg™ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg™ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg™ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg™ mission of promoting free access to electronic works by freely sharing Project Gutenberg™ works in compliance with the terms of this agreement for keeping the Project Gutenberg™ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg™ License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg™ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg™ License must appear prominently whenever any copy of a Project Gutenberg™ work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may

copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg™ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg™ trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg™ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg™ License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg™ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg™.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg™ License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg™ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg™ works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg™ electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg™ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg™ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do

copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg™ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg™ work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg™

Project Gutenberg™ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg™’s goals and ensuring that the Project Gutenberg™ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg™ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation’s EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state’s laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

Section 5. General Information About Project Gutenberg™ electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg™ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg™ eBooks with only a loose network of volunteer support.

Project Gutenberg™ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.