

QUEST OF THE UNCREATED

Others called their expedition a "wild ghost chase." But for Space Commodore John Grimes and the beautiful Sonya Verrill who had initiated the project, it was strictly scientific research. Their trip along the rim of the galaxy in search of two men—two dead men—was also an investigation of the long-puzzling phenomenon of the Rim Ghosts. They would do this by penetrating into alternate universes.

There was only one real problem involved in this study—how to report its results. For once the break-through to an alternate world was achieved, there was no known way of getting out....

Turn this book over for second complete novel.

A. BERTRAM CHANDLER, who is both a Fellow of the British Interplanetary Society and the Chief Officer of an Australian coastal steamer, writes of himself:

"I have always been an avid reader of science-fiction and have always wanted to write. Until in possession of my Master's Certificate, I always felt that my spare time should be devoted to study rather than to writing. My first visit to New York was after the entry of the U. S. into the war. Shortly after, having passed for Master, I had no excuse for not writing, and I became a regular contributor to the magazines in the field.

"After the war I continued writing, but dropped out after promotion to Chief Officer. After my emigration to Australia, I was bullied by my second wife into taking up the pen again, and became once again a prolific writer of short stories. Finally, I felt that the time was ripe for full-length novels. I have dropped shorter pieces feeling that they gave insufficient scope for character development. I think that science-fiction and fantasy are ideal vehicles for putting over essential truths."

A. BERTRAM CHANDLER

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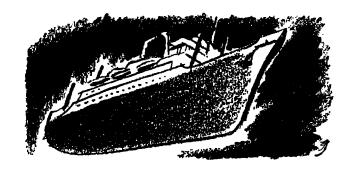
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For my nose-to-grindstone keeper

THE COILS OF TIME
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1

THE INEVITABLE freezing wind whistled thinly across the Port Forlorn landing field, bringing with it eddies of gritty dust and flurries of dirty snow. From his office, on the top floor of the Port Administration Building, Commodore Grimes stared out at what, over the long years, he had come to regard as his private kingdom. On a day such as this there was not much to see. Save for Faraway Quest, the Rim Worlds Government survey ship, the spaceport was deserted, a state of affairs that occurred but rarely. Soon it would resume its usual activity, with units of the Rim Runners' fleet dropping down through the overcast, from Faraway, Ultimo and Thule, from the planets of the Eastern Circuit, from the anti-matter systems to the Galactic West. But now there was only the old Quest in port, although a scurry of activity around her battered hull did a little to detract from the desolation of the scene.

Grimes stepped back from the window to the pedestal on

which the big binoculars swiveled on their universal mount. He swung the instrument until Faraway Quest was centered in the field of view. He noted with satisfaction that the bitter weather had done little to slow down the work of refitting. The flare of welding torches around the sharp stem told him that the new Mass Proximity Indicator was being installed. The ship's original instrument had been loaned to Captain Calver for use in his Outsider; and the Outsider, her Mannschenn Drive unit having been rebuilt rather than merely modified, was now falling across the incredibly wide and deep gulf of light years between the island universes.

And I, thought Grimes sullenly, am stuck here. How long ago was my last expedition, when I took out the old Quest and surveyed the inhabited planets of what is now the Eastern Circuit, and the anti-matter worlds to the Galactic West? But they say that I'm too valuable in an administrative capacity for any further gallivanting, and so younger men, like Calver and Listowel, have all the fun, while I just keep the seat of my office chair warm....

"Commodore Grimes!"

Grimes started as the sharp female voice broke into his thoughts, then stepped back from the instrument, turning to face his secretary. "Yes, Miss Willoughby?"

"Port Control called through to say that they've just given landing clearance to Star Roamer."

"Star Roamer?" repeated the Commodore slowly. "Oh, yes. Survey Service."

"Interstellar Federation Survey Service," she corrected him. He smiled briefly, the flash of white teeth momentarily taking all the harshness from his seamed, pitted face. "That's the only Survey Service that piles on any gees." He sighed. "Oh, well, I suppose I'd better wash behind the ears and put on a clean shirt...."

"But your shirts are always clean, Commodore Grimes," the girl told him.

He thought, I wish you wouldn't take things so literally, and said, "Merely a figure of speech, my dear."

"E.T.A. fifteen minutes from now," she went on.

"And that's the Survey Service for you," he said. "Come in at damn nearly escape velocity, and fire the braking jets with one-and-a-half seconds to spare. But it's the Federation's tax payers that foot the fuel bills, so why should we worry?"

"You were in the Survey Service yourself, weren't you?" she asked.

"Many, many years ago. But I regard myself as a Rimworlder, even though I wasn't born out here." He smiled again as he said, "After all, home is where the heart is . . ." And silently he asked himself, But where is the heart?

He wished that it was night and that the sky was clear so that he could see the stars, even if they were only the faint, far luminosities of the Galactic Rim.

Star Roamer came in with the usual Survey Service éclat, her exhaust flare a dazzling star in the gray sky long before the bellowing thunder of her descent reverberated among the spaceport buildings, among cranes and gantries and conveyer belts. Then the long tongue of incandescence licked the sparse drifts and frozen puddles into an explosion of dirty steam that billowed up to conceal her shining hull, that was swept from the needle of bright metal by the impatient wind, fogging the wide window of Grimes' office with a fine drizzle of condensation.

She sat there on the scarred concrete—only a little ship, and yet with a certain air of arrogance. Already the beetle-like vehicles of the port officials were scurrying out to her. Grimes thought sourly, I wish that they'd give our own ships the same prompt attention. Remembering his own

Survey Service days he felt a certain nostalgia. Damn it all, he thought, I piled on more gees as a snotty-nosed Ensign than as Astronautical Superintendent of a shipping line and Commodore of the Rim Worlds Naval Reserve. . . .

He stood by the window, from which the mist had now cleared, and watched the activity around Star Roamer. The ground vehicles were withdrawing from her sleek hull, and at the very point of her needle-sharp prow, the red light, almost painfully bright against the all-surrounding grayness, was blinking. He heard Miss Willoughby say, "She's blasting off again." He muttered in reply, "So I see." Then, in a louder voice, "That was a brief call. It must have been on some matter of Survey Service business. In that case, I should have been included in the boarding party. As soon as she's up and away, my dear, send word to the Port Captain that I wish to see him. At once."

There was a flicker of blue incandescence under Star Roamer's stern and then, as though fired from some invisible cannon, she was gone, and the sudden vacuum of her own creation was filled with peal after crashing peal of deafening thunder. Grimes was aware that the speaker of the intercom was squawking, but could not make out the words. His secretary did. Shouting to be heard over the dying reverberations she cried, "Commander Verrill to see you, sir!"

"I should have washed behind the ears," replied Grimes. "But it's too late now."

II

She hasn't changed much, thought Grimes, as she strode into his office. She was wearing civilian clothes—a swirling, high-collared cloak in dark blue, tapered black slacks, a white jersey of a material so lustrous that it seemed almost

luminous. And that outfit, went on the Commodore to himself, would make a nasty hole in a year's salary. Rob Roy tweed and Altairian crystal silk . . . The Survey Service looks after its own. Even so, he looked at her with appreciation. She was a beautiful woman, and on her an old flour sack would have looked almost as glamorous as the luxurious materials that adorned her fine body. In her pale blonde hair the slowly melting snow crystals sparkled like diamonds.

"Welcome aboard, Commander," said Grimes.

"Glad to be aboard, Commodore," she replied softly.

She allowed him to take the cloak from her, accepted the chair that Miss Willoughby ushered her towards. She sat down gracefully, watching Grimes as he carefully hung up her outer garment.

"Coffee, Commander Verrill? Or something stronger?"
"Something stronger." A smile flickered over her full lips.
"As long as it's not your local rot-gut, that is."

"It's not. I have my sources of supply. Nova Caledon Scotch-on-the-rocks?"

"That will do nicely. But please omit the rocks." She shivered a little theatrically, "What a vile climate you have here, Commodore."

"It's the only one we have. Say when."

"Right up, please. I need some central heating."

And so you do, thought Grimes, studying her face. So you do. And it's more than our weather that's to blame. You did what had to be done insofar as that mess involving you and Jane and Derek Calver was concerned, but to every action there's an equal and opposite reaction—especially once the glow of conscious nobility has worn off.

She said, "Down the hatch."

"Down the hatch," he replied. "A refill?"

"Thank you."

He took his time about pouring the drinks, asking as he busied himself with glasses and ice cubes and bottle, "You

must be here on important business, Commander. A courier ship all to yourself."

"Very important," she replied, looking rather pointedly towards Miss Willoughby, who was busying herself with the papers on her desk in a somewhat ostentatious manner.

"H'm. Yes. Oh, Miss Willoughby, I'd like you to run along to the Stores Superintendent, if you wouldn't mind, to straighten up the mess about Rim Falcon's requisition sheets."

"But I still have to run through Rim Kestrel's repair list, sir.'

"Rim Kestrel's not due in for a week yet, Miss Willoughby." "Very well, sir."

The girl straightened the litter on her desk, got up and walked slowly and with dignity from the office.

Sonya Verrill chuckled. "Such sticky-beaking would never

be tolerated in the Service, Commodore."

"But you don't have to put up with civilian secretarial staff, Commander. Come to that, I well recall that when I was in the Service myself an occasional gift of some outworld luxury to a certain Lieutenant Masson-she was old Admiral Hall's secretary-could result in the premature release of all sorts of interesting information regarding promotions, transfers and the like."

"Things are different now, Commodore,"

"Like hell they are. Anyhow, Sonya, you can talk freely now. This office is regularly debugged."

"Debugged, John?"

"Yes. Every now and again high-ups in the various Ministries decide that they aren't told enough of Rim Runners' affairs-of course, the Aeriel business made me very unpopular, and if Ralph Listowel hadn't got results, serendipitous ones at that, I'd have been out on my arse. And then your people manage to plant an occasional bug themselves."

"Come off it, John."

"Still playing the little, woolly lamb, Sonya?"

She grinned. "It's part of my job. Perhaps the most important part."

"And what's the job this time?"

"There won't be any job unless our Ambassador to the Rim Confederation manages to talk your President into supplying help. But I think that he will. Relations have been fairly friendly since your autonomy was recognized."

"If you want a ship," said Grimes, "the charter rates will be favorable to ourselves. But surely the Federation has tonnage to spare. There are all the Commission's vessels

as well as your own Survey Service wagons."

"Yes, we've plenty of ships," she admitted. "And plenty of personnel. But it's know-how that we're after. You hardly need to be told that your people have converted this sector of Space into your own backyard, and put up a big sign, No Trespassing. Even so, we hear things. Such as Rim Ghosts, and the winds of it that blew your pet Aeriel through about half a dozen alternative time tracks. And there was that business of the wet paint on Kinsolving's Planet years ago—but that, of course, was before you became autonomous, so we had the job of handling it...."

"And the Outsiders' ship . . ." supplied Grimes.

"No. Not in the same class, John. She'd drifted in, or been placed there, by visitors from another Galaxy. And, in any case, we're already in on that." She held out her glass for a refill.

"You're welcome, Sonya, but . . ."

"Don't worry John. Olga Popovsky, the Beautiful Spy with hollow legs—that's me."

"You know your own capacity."

"Of course. Thank you. Now, as I was saying, our top brass is interested in all the odd things that seem to happen only in this sector of Space, and the Rhine Institute boys are interested too. It was decided that there was only one Intelligence Officer in the Service with anything ap-

proaching an intimate knowledge of the Rim. I needn't tell you who that is. It was decided, too, that I'd work better if allowed to beg, borrow or steal Rim Worlds' personnel. Oh, the Service can afford to pay Award rates, and above. Frankly, when I was offered the job I almost turned it down. I know the Rim—but my memories of this sector of Space aren't all too happy . . ." She leaned forward in her chair, put her slim hand on Grimes' knee. "But . . ."

"But what, Sonya?"

"All this business of Rim Chosts, all these theories about the curtains between the alternative universes wearing thin here, on the very edge of the expanding Galaxy . . . You know something of my history, John. You know that there have only been two men, real men, in my life. Bill Maudsley, who found the Outsiders' quarantine station, and who paid for the discovery with his life. And Derek Calver, whose first loyalties were, after all, to Jane . . . Damn it all, John, I'm no chicken. I'm rather tired of playing the part of a lone wolf-or a lone bitch, if you like. I want me a man-but the right man-and I want to settle down. I shall be due a very handsome gratuity from the Service when I retire, and there are still sparsely settled systems in this Galaxy where a little, one-ship company could provide its owners and operators with a very comfortable living. . . ." "So?"

"So it's bloody obvious. I've been put in charge of this wild goose chase—and with any luck at all I shall catch me my own wild gander. Surely there must be some alternative Universe in which I shall find either Bill or Derek, with no strings attached."

"And what if you find them both at once?" asked Grimes.
"As long as it's in a culture that approves of polyandry," she grinned. Then she was serious again. "You can see, John, that this—this research may well fantastically advance the frontiers of human knowledge."

"And it may well," he told her, "bring you to the haven where you would be." He raised his glass to her. "And for that reason, Sonya, I shall do everything within my power to help you."

TTT

AFTER SONYA had left he pottered around his office for a while, doing jobs that could have been done faster and better by Miss Willoughby. When his secretary returned from her visit to the Stores Superintendent and, with a display of efficiency, tried to take the work from his hands, he dismissed her for the day. Finally, realizing that he was accomplishing nothing of any value, he put the papers back in their files and, having drawn himself a cup of coffee from the automatic dispenser, sat down to smoke his battered pipe.

He felt sorry for Sonya Verrill. He knew much of her past history—more, in fact, than she had told him. He was sorry for her, and yet he envied her. She had been given fresh hope, a new goal towards which to strive. Whether or not she met with success was not of real importance. If she failed, there would be other goals, and still others. As an officer of the Survey Service Intelligence Branch she was given opportunities for travel denied even to the majority of professional spacemen and -women. Grimes smiled at the corniness of the thought and muttered, "Someday her prince will come . . ."

Yes, he envied her. She, even within the framework of regulations that governed her Service, had far more freedom of movement than he had. He strongly suspected that she was in a position to be able to select her own assignments. And I, he thought, am marooned for the rest of my

natural—or, if I so desire, unnatural—life on this dead-end world at the bitter end of sweet damn' all . . .

Come off it, Grimes, he told himself. Come off it, Grimes, Commodore Grimes, Rim Worlds Naval Reserve. Don't be so bloody sorry for yourself. You've climbed to the top of your own private tree.

Even so . . .

He finished his coffee, poured himself another cup. He thought, I should have offered to put her up during her stay on Lorn. And then he was glad that he had not made the offer. She was used to luxury—luxury on a governmental expense account, but luxury nonetheless—and surely would have been appalled by his messy widower's establishment. His children were grown up, and had their own homes and, in any case, incurable planetlubbers that they were, would have little in common with one who, after all, was a professional adventuress.

So . . .

So I can enjoy adventures-although not in the same sense-vicariously, he thought. I'll do what I can for Sonya, and hope to receive in return a first-hand account of all that happens to her. She said that she would want a ship-well, she shall have Faraway Quest. It's time that the poor old girl was taken for another gallop. And she'll be wanting a crew. I'll put out the call for volunteers before I get definite word that the expedition has been approved—just quietly, there's no need to get the politicians' backs up. Rimworlders, she specified. Rimworlders born and bred. I can see why. People raised on the Rim are far more likely to have counterparts in the alternative Universes than those of us who have, like myself, drifted out here, driven out here by the winds of chance. I shouldn't have much trouble in raising a team of officers, but a Master will be the problem. Practically all our Captains are refugees from the big, Earth-based companies, or from the Survey Service.

But there was no urgency, he told himself.

He drew yet another cup of coffee and, carrying it, walked to the wide window. Night had fallen and the sky had cleared and, work having ceased for the day, there was no dazzle of lights from the spaceport to rob the vision of keepness.

Overhead in the blackness was one bright star, the Faraway sun, and beyond it lay the faint, far nebulosities. Low in the east the Lens was rising, the upper limb only visible, a parabola of misty light. Grimes looked away from it to the zenith, to the dark immensities through which Calver in his Outsider was falling, perhaps never to return. And soon Sonya Verrill would be falling—but would she? could she?—through and across even stranger, even more fantastic gulfs, of Time as well as of Space.

Grimes shivered. Suddenly he felt old and alone, although

he loathed himself for his self pity.

He left his office, fell down the dropshaft (what ironyl) to the ground floor, got out his monocar from the executives' garage and drove home.

Home was a large house on the outskirts of Port Forlorn. Home was a villa, solid and well kept—the maintenance service to which Grimes subscribed was highly efficient—but sadly lacking in the touches of individuality, or imagination, that only a woman can supply.

The commodore drove his car into his garage and, after having shut off the engine, entered the house proper directly from the outbuilding. He did not, as he usually did, linger for a few minutes in the conservatory that housed his collection of exotic plants from a century of worlds. He went straight to his lounge, where he helped himself to a strong whisky from the bar. Then he sat down before his telephone console and, with his free hand, punched the number for library service.

The screen lit up, and in it appeared the head and shoulders of a girl who contrived to look both efficient and beautiful. Grimes smiled, as he always did, at the old-fashioned horn-rimmed spectacles that, some genius had decided, made the humanoid robot look like a real human librarian. A melodious contralto asked, "May I be of service, sir?"

"You may, my dear," answered Grimes. (A little subtle or not so subtle—flattery worked wonders with often temperamental robots.) "I'd like whatever available data you have on Rim Ghosts."

"Visual, sir, or viva voce?"

"Viva voce, please." (Even this tin blonde, with her phony femininity, was better than no woman at all in the house.)

"Condensed or detailed, sir?"

"Condensed, please. I can always ask you to elaborate as and if necessary."

"Very good, sir. The phenomenon of the Rim Ghosts occurs, as the name implies, only on the Rim. Sightings are not confined to single individuals, so therefore cannot be assumed to be subjective in nature. A pattern has been established regarding these sightings. One member of a party of people will see himself, and be seen by his companions, in surroundings and company differing, sometimes only subtly, from those of actuality. Cases have been known in which an entire group of people has seen its Rim Ghost counterpart.

"For a while it was thought that the apparitions were prophetic in character, and the orthodox explanation was that of precognition. With the collection of a substantial body of data, however, it became obvious that prophetic visions comprised only about 30% of the total. Another 30% seemed to be recapitulations of past events, 20% had a definite

here-and-now flavor, while the remaining 20% depicted situations that, in our society, can never arise.

"It was in the year 313 A.G. that Dr. Foulsham, of the Terran Rhine Institute, advanced his Alternative Universe Theory. This, of course, was no more than the reformulation of the idea played around with for centuries by speculative thinkers and writers, that of an infinitude of almost parallel Time Tracks, the so-called Worlds of If. According to Dr. Foulsham, on Earth and on the worlds that have been colonized for many generations, the barriers between the individual tracks are . . ." The robot paused.

"Go on, my dear," encouraged Grimes. "This is only a condensation. You needn't bother trying to break down fancy scientific terminology."

"Thank you, sir. The barriers, as I was trying to say in suitable language, are both high and thick, so that a breakthrough is almost impossible. But on the very rim of the expanding Galaxy these barriers are . . . tenuous, so that very often a fortuitous breakthrough does occur.

"An example of such a breakthrough, but visual only, was that achieved by Captain Derek Calver and his shipmates when he was serving as Chief Officer of the freighter Lorn Lady. The ship was proceeding through deep space, under Mannschenn Drive, when another vessel was sighted close alongside. In the control room of the other spacecraft Calver saw himself-but he was wearing Master's uniformand most of the others who were with him in Lorn Lady's control compartment. He was able, too, to make out the name of the strange ship. It was the Outsider. Some months later, having become the recipient of a handsome salvage award. Calver and his shipmates were able to buy a secondhand ship and to operate as a small tramp shipping company. They christened her the Outsider. This, then, was obviously one of the precognitive apparitions, and can be explained by the assumption that the Alternative Universe

in which Calver's career runs almost parallel to his career in this Universe possesses a slightly different time scale.

"Physical breakthrough was inadvertently achieved by Captain Ralph Listowel of the experimental light jammer Aeriel. Various members of his crew unwisely attempted to break the light barrier' and, when the ship was proceeding at a velocity only fractionally less than that of light, discharged a jury rigged rocket hoping thereby to outrun the photon gale. They did not, of course, and Aeriel's crew became Rim Chosts themselves, experiencing life in a succession of utterly strange cultures before, more by luck than judgment, returning to their own. The unexpected result of this ill-advised experiment was the developing of a method whereby atomic signs may be reversed, thereby making possible intercourse between our planets and the anti-matter worlds.

"There is no doubt that the Rim Chost phenomenon is one deserving of thorough investigation, but with the break-away of the Rim Worlds from the Federation it has not been possible to maintain full contact with either the Survey Service or the Rhine Institute, which bodies, working in conjunction, would be eminently capable of carrying out the necessary research..."

"You're out of date, duckie," chuckled Grimes.

"I beg your pardon, sir?"

"You're out of date. But don't let it worry you; it's not your fault. It's we poor, inefficient humans who're to blame, for failing to feed new data into your memory tanks."

"And may I ask, sir, the nature of the new data?"

"Just stick around," said Grimes, "and some day, soon, I may be able to pass it on to you."

If Sonya comes back to tell me, he thought, and his odd mood of elation evaporated.

IV

A WEEK PASSED, and for Commodore Grimes it was an exceptionally busy one. Rim Mammoth—ex-Beta Geminorum—had berthed, and that ship, as usual, was justifying her reputation as the white elephant of Rim Runners' fleet. A large consignment of fish had spoiled on the passage from Mellise to Lorn. The Chief Reaction Drive Engineer had been beaten up in the course of a drunken brawl with the Purser. The Second, Third and Fourth Officers had stormed into the Astronautical Superintendent's presence to aver that they would sooner shovel sludge in the State Sewage Farm than lift as much as another centimeter from a planetary surface under the command of the Mammoth's Master and Chief Officer.

Even so, Grimes found time to intiate his preliminary inquiries. To begin with, he had his secretary draw up a questionnaire, this asking for all relevant data on the sighting of Rim Ghosts. It seemed to him that Sonya Verrill would require for her crew personnel who were in the habit of sighting such apparitions. Then, having come to the reluctant conclusion that a lightjammer would be the most suitable research ship, he studied the schedules of such vessels as were in operation, trying to work out which one could be withdrawn from service with the minimal dislocation of the newly developed trade with the anti-matter systems.

Rather to his annoyance, Miss Willoughby issued copies of the questionnaire to the crew of the only ship at the time in port—Rim Mammoth. The officers of that vessel were all in his black books, and it had been his intention to split them up, to transfer them to smaller and less well-appointed units of the fleet. Nonetheless, he studied the forms with interest when they were returned. He was not surprised by

what he discovered. The Master and the Chief Officer, both of whom had come out to the Rim from the Interplanetary Transport Commission's ships, had no sightings to report—Captain Jenkins, in fact, had scrawled across the paper, Superstitious Rubbish! The Second, Third and Fourth Officers, together with the Psionic Radio Officer, were all third generation Rim Worlders, and all of them had been witnesses, on more than one occasion, to the odd phenomena.

Grimes ceased to be annoyed with Miss Willoughby. It looked as though the manning problem was already solved, insofar as executive officers were concerned. The Second, Third and Fourth Mates of Rim Mammoth were all due for promotion, and Captain Jenkins' adverse report on their conduct and capabilities could well result in the transfer of their names to the bottom of the list. So there was scope for a little gentle blackmail. Volunteers wanted for a Rim Ghost hunt! You, and you, and you!

But there was a snag. None of them had any sail training. How soon would Sonya Verrill want her ship? Would there be time to put the officers concerned through a hasty course in the handling of lightjammers? No doubt he would be able to find a team of suitably qualified men in the existing lightjammer fleet, but all of them were too useful where they were.

It was while he was mulling this problem over in his mind that Commander Verrill was announced. She came into his office carrying a long envelope. She held it out to him, grinning. "Sealed orders, Commodore."

Grims accepted the package, studying it cautiously. It bore the crest of the Rim Confederation.

"Aren't you going to open it?"

"What's the rush?" he grunted.

But he picked up the paper knife from his desk-it had been the deadly horn of a Mellisan sea unicorn-and slit the envelope, pulling out the contents.

He skipped the needlessly complicated legal language while, at the same time, getting the gist of it. As a result of talks between the President of the Rim Worlds Confederation and the Ambassador of the Interstellar Federation, it had been decided that the Confederation was to afford to the Federation's Survey Service all possible assistance—at a price. One Commodore Grimes was empowered to negotiate directly with one Commander Verrill regarding the time charter of a suitable vessel and the employment of all necessary personnel. . . .

Grimes read on-and then he came to the paragraph that caused him to raise his eyebrows in surprise.

Commodore Grimes was granted indefinite leave of absence from his post of Astronautical Superintendent of Rim Runners, and was to arrange to hand over to Captain Farley as soon as possible. Commodore Grimes was to sail as Master of the vessel chartered by the Survey Service, and at all times was to further and protect the interests of the Rim Confederation. . . .

Grimes grunted, looked up at the woman from under his heavy eyebrows. "Is this your doing, Sonya?"

"Partly. But in large measure it's due to the reluctance of your government to entrust one of its precious ships to an outsider."

"But why me?"

She grinned again. "I said that if I were obliged to ship a Rim Confederation sailing master, I insisted on exercising some little control over the appointment. Then we all agreed that there was only one Master of sufficiently proven reliability to meet the requirements of all concerned . . ." She looked a little worried. "Aren't you glad, John?"

"It's rather short notice," he replied tersely and then, as he watched her expression, he smiled. "Frankly, Sonya, before you blew in aboard Star Roamer I'd decided that I

was sick and tired of being a desk-borne Commodore. This crazy expedition of yours will be better than a holiday."

She snapped, "It's not crazy."

His eyebrows went up. "No? An interstellar ghost hunt?" "Come off it, John. You know as well as I that the Rim Ghosts are objective phenomena. It's a case of paranormal physics rather than paranormal psychology. It's high time that somebody ran an investigation—and if you people are too tired to dedigitate, then somebody else will."

Grimes chuckled. "All right, all right. I've never seen a Rim Chost myself, but the evidence is too-massive?—to laugh away. So, while Miss Willoughby starts getting my papers into something like order for Captain Farley—he's on leave at present, so we won't have long to wait for him—we'll talk over the terms of the charter party.

"To begin with, I assume that you'll be wanting one of the lightjammers. Cutty Sark will be available very shortly."

She told him, "No. I don't want a lightjammer."

"I would have thought that one would have been ideal for this . . . research."

"Yes. I know all about Captain Ralph Listowel and what happened to him and his crew on the maiden voyage of Aeriel. But there's one big snag. When Aeriel's people switched Time Tracks, they also, to a large extent, switched personalities. When I visit the Universe next door I want to do it as me, not as a smudged carbon copy."

"Then what sort of ship do you want?"

She looked out of the window. "I was hoping that your Faraway Quest would be available."

"As a matter of fact, she is."

"And she has more gear than most of your merchant shipping. A Mass Proximity Indicator, for example . . ."

"Yes."

"Carlotti Communication and Direction Finding Equipment?"

"Yes."

Then, "I know this is asking rather much—but could a sizeable hunk of that anti-matter iron be installed?"

He grinned at her. "Your intelligence service isn't quite as good as you'd have us believe, Sonya. The Quest has no anti-matter incorporated in her structure yet—as you know, it's not allowed within a hundred miles of any populated area. But there's a suitably sized sphere of the stuff hanging in orbit, and there it stays until Faraway Quest goes upstairs to collect it. You know the drill, of course—the anti-matter, then an insulation of neutronium, then a steel shell with powerful permanent magnets built into it to keep the anti-matter from making contact with normal matter. A neutrino bombardment and, presto!—anti-gravity. As a matter of fact the reason for the Quest's refitting was so that she could be used for research into the problems arising from incorporating anti-gravity into a ship with normal interstellar drive."

"Good. Your technicians had better see to the installing of the anti-matter, and then ours—there's a bunch of them due in from Elsinore in *Rim Bison*—will be making a few modifications to the Carlotti gear. Meanwhile, have you considered manning?"

"I have. But, before we go any further, just what modifications do you have in mind? I may as well make it clear now that the Carlotti gear will have to be restored to an as-was condition before the ship comes off hire."

"Don't worry, it will be. Or brand new equipment will be installed." She paused and glanced meaningfully at the coffee dispenser. Grimes drew her a cup, then one for himself. "Well, John, I suppose you're all agog to learn what's going to happen to your beloved Faraway Quest, to say nothing of you and me and the mugs who sail with us. Get this straight, I'm no boffin. I can handle a ship and navigate

well enough to justify my Executive Branch commission, but that's all.

"Anyhow, this is the way of it, errors and omissions expected. As soon as the necessary modifications have been made to the ship, we blast off, and then cruise along the lanes on which Rim Ghost sightings have been most frequent. It will help, of course, if all members of the crew are people who've made a habit of seeing Rim Chosts..."

"That's been attended to," said Grimes.

"Good. So we cruise along quietly and peacefully—but keeping our eyes peeled. And as soon as a Ghost is sighted—Action Stations!"

"You aren't going to open fire on it?" demanded Grimes.

"Of course not. But there will be things to be done, and done in a ruddy blush. The officer of the watch will push a button that will convert the ship into an enormously powerful electro-magnet, and the same switch will actuate the alarm bells. Automatically the projector of the modified Carlotti beacon will swing to bring the Ghost into its field. The boffins tell me that what should happen is that a bridge, a temporary bridge, will be thrown across the gulf between the Parallel Universes."

"I see. And as Faraway Quest is an enormously powerful magnet, the other ship, the Ghost, will be drawn into our Universe."

"No," she said impatiently. "Have you forgotten the antimatter, the anti-gravity? The Quest will have one helluva magnetic field, but no mass to speak of. She'll be the one that gets pulled across the gap, or through the curtain, or however else you care to put it."

"And how do we get back?" asked Grimes.

"I'm not very clear on that point myself," she admitted. The Commodore laughed. "So when I man the *Quest* it will have to be with people with no ties." He said softly, "I have none."

"And neither have I, John," she told him. "Not any longer."

V

CAPTAIN FARLEY was somewhat disgruntled at being called back from leave, but was mollified slightly when Grimes told him that he would be amply compensated. As soon as was decently possible the Commodore left Farley to cope with whatever problems relative to the efficient running of Rim Runners arose-after all, it was Miss Willoughby who really ran the show-and threw himself into the organizing of Sonya Verrill's expedition. What irked him was the amount of time wasted on legal matters. There was the charter, of course, and then there was the reluctance of Lloyds' surveyors to pass as spaceworthy a ship in which Mannschenn Drive and anti-matter were combined, not to say one in which the Carlotti gear had been modified almost out of recognition. Finally Sonya Verrill was obliged to play hell with a Survey Service big stick, and the gentlemen from Lloyds withdrew, grumbling.

Manning, too, was a problem. The Second, Third and Fourth Mates of Rim Mastodon agreed, quite willingly, to sign on Faraway Quest's articles as Chief, Second and Third. The Psionic Radio Officer was happy to come along with them. After a little prodding at the ministerial level the Catering and Engineering Superintendents supplied personnel for their departments. And then the Institute of Spacial Engineers stepped in, demanding for its members the payment of Danger Money, this to be 150% of the salaries laid down by the Award. Grimes was tempted to let them have it—after all, it was the Federation's taxpayers who would be footing the bill—and then, on second thoughts, laid his ears back and refused to play. He got over the hurdle rather neatly, persuading the Minister of Shipping and the

Minister for the Navy to have Faraway Quest commissioned as an auxiliary cruiser and all her officers—who were, of course, reservists, called up for special duties. Like Lloyds, the Institute retired grumbling.

As a matter of fact, Grimes was rather grateful to them for having forced his hand. Had the Quest blasted off as a specialized merchant vessel only, with her crew on Articles, his own status would have been merely that of a shipmaster, and Sonya Verrill, representing the Survey Service, would have piled on far too many gees. Now he was a Commodore on active service, and, as such, well and truly outranked any mere Commander, no matter what pretty badge she wore on her cap. It was, he knew well, no more than a matter of male pride, but the way that things finally were he felt much happier.

So, after the many frustrating delays, Faraway Quest finally lifted from her berth at the Lorn spaceport. Grimes was rusty, and knew it, and allowed young Swinton—lately Second Officer of Rim Mammoth, now Lieutenant Commander Swinton, First Lieutenant of R.W.S. Faraway Quest—to take the ship upstairs. Grimes watched critically from one of the spare acceleration chairs, Sonya Verrill watched critically from the other. Swinton—slight, fair-haired, looking like a schoolboy in a grown-up's cut-down uniform—managed well in spite of his audience. The old Quest climbed slowly at first, then with rapidly increasing acceleration, whistling through the overcast into the clear air beyond, the fast thinning air, into the vacuum of Space.

Blast-off time had been calculated with considerable exactitude—"If it had been more exact," commented Grimes, "we'd have rammed our hunk of anti-matter and promptly become the wrong sort of ghosts . . ."—and so there was the minimum jockeying required to match orbits with the innocent-looking sphere of shining steel. The Quest had brought a crew of fitters up with her, men with experience

of handling similar spheres. Working with an economy of motion that was beautiful to watch they gentled the thing in through the special hatch that had been made for it, bolted it into its seating. Then it was the turn of the physicists, who set up their apparatus and bathed the anti-iron in a flood of neutrinos. While this operation was in progress, two tanker rockets stood by, pumping tons of water into the extra tanks that had been built into the Quest's structure. This, Grimes explained to his officers, was to prevent her from attaining negative mass and flying out of her orbit, repelled rather than attracted by Lorn and the Lorn sun, blown out of station before the landing of the assorted technicians and the loading of final essential items of stores and equipment.

At last all the preliminaries were completed. Faraway Quest was fully manned, fully equipped, and all the dock-yard employees had made their transfer to the ferry rocket. This time Grimes assumed the pilot's chair. Through the viewports he could see the globe that was Lorn, the globe whose clouds, even from this altitude, looked dirty. Looking away from it, he told himself that he did not care if he never saw it again. Ahead, but to starboard, a lonely, unblinking beacon in the blackness, was the yellow spark that was the Mellise sun. The commodore's stubby fingers played lightly over his control panel. From the bowels of the ship came the humming of gyroscopes, and as the ship turned on her short axis the centrifugal force gave a brief illusion of off-center gravity.

The Lorn sun was ahead now.

"Sound and alarm, Commander Swinton," snapped Grimes. The First Lieutenant pressed a stud, and throughout the ship there was the coded shrilling of bells, a succession of Morse R's, short-long-short, short-long-short. R is for rocket, thought Grimes. Better than all this civilian yapping into microphones.

Abruptly the shrilling ceased.

With deliberate theatricality Grimes brought his fist down on the firing button. The giant hand of acceleration pushed the officers down into the padding of their chairs. The Commodore watched the sweep-second hand of the clock set in the center of the panel. He lifted his hand again—but this time it was with an appreciable effort—again brought it down. Simultaneously, from his own control position, Swinton gave the order, "Start Mannschenn Drive."

The roar of the rockets cut off abruptly, but before there

The roar of the rockets cut off abruptly, but before there was silence the keening song of the Drive pervaded the ship, the high-pitched complaint of the ever-spinning, ever-precessing gyroscopes. To the starboard hand, the great, misty lens of the Galaxy warped and twisted, was deformed into a vari-colored convolution at which it was not good to look. Ahead, the Mellise sun had taken the likelihood of a dimly luminous spiral.

Grimes felt rather pleased with himself. He had a crew of reservists, was a reservist himself, and yet the operation had been carried out with naval snap and efficiency. He turned to look at Sonya Verrill, curious as to what he would read in her expression.

She smiled slightly and said, "May I suggest, sir, that we splice the mainbrace?" She added, with more than a hint of cattiness, "After all, it's the Federation's taxpayers who're footing the bill."

$\mathbf{v}_{\mathbf{I}}$

THE SHIP having been steadied on to her trajectory, Grimes gave the order that Sonya Verrill had suggested. All hands, with the exception of the watchkeeping officers, gathered in Faraway Quest's commodious wardroom, strapping themselves into their chairs, accepting drinking bulbs

from the tray that Karen Schmidt, the Catering Officer, handed around.

When everybody had been supplied with a drink the Commodore surveyed his assembled officers. He wanted to propose a toast, but had never possessed a happy knack with words. The only phrases that came to his mind were too stodgy, too platitudinous. At last he cleared his throat and said gruffly, "Well, gentlemen—and ladies, of course—you may consider that the expedition is under way, and the mainbrace is in the process of being spliced. Perhaps one of you would care to say something."

Young Swinton sat erect in his chair—in Free Fall, of course, toasts were drunk sitting—and raised his liquor bulb. He declaimed, trying to keep the amusement from his voice, "To the wild ghost chase!"

There was a ripple of laughter through the big compartment—a subdued merriment in which, Grimes noted, Sonya Verrill did not join. He felt a strong sympathy for her. As far as she was concerned this was no matter for jest, this pushing out into the unknown, perhaps the unknowable. It was, for her, the fruition of months of scheming, persuading, wire-pulling. And yet, Grimes was obliged to admit, the play on words was a neat one. "Very well," he responded, "to the wild ghost chase it is."

He sipped from his bulb, watched the others doing likewise. He reflected that insofar as Rim Worlds personnel was concerned it would have been hard to have manned the ship with a better crew—for this particular enterprise. All of them, during their service in the Rim Runners' fleet, had acquired reputations—not bad, exactly, but not good. Each of them had exhibited, from time to time, a certain . . . scattiness? Yes, scattiness. Each of them had never been really at home in a service that, in the final analysis, existed only to make the maximum profit with the minimum expense. But now—the Federation's taxpayers had deep pockets—

expense was no object. There would be no tedious inquiries into the alleged squandering of reaction mass and consumable stores in general.

Insofar as the Survey Service personnel—the Carlotti Communications System specialists—were concerned, Grimes was not so happy. They were an unknown quantity. But he relied on Sonya Verrill to be able to handle them—after all, they were her direct subordinates.

He signaled to Karen Schmidt to serve out another round of drinks, then unstrapped himself and got carefully to his feet, held to the deck by the magnetized soles of his shoes. He said, "There's no need to hurry yourselves, but I wish to see all departmental heads in my day room in fifteen minutes."

He walked to the axial shaft, let himself into the tubular alleyway and, ignoring the spiral staircase, pulled himself rapidly forward along the guideline. A vibration of the taut wire told him that he was being followed. He turned to see who it was, and was not surprised to see that it was Sonya Verrill.

She sat facing him across his big desk.

She said, "This is no laughing matter, John. This isn't just one big joke."

"The wild ghost chase, you mean? I thought that it was rather clever. Oh, I know that you've your own axe to grind, Sonya—but you have to admit that most of us, and that includes me, are along just for the hell of it. Your people, I suppose, are here because they have to be."

"No. They're volunteers."

"Then don't take things so bloody seriously, woman. We shall all of us do our best—my crew as well as yours. But I don't think that anybody, apart from myself, has any clue as to your private motives."

She smiled unhappily. "You're right, of course, John. But..."

There was a sharp rap at the door. "Come in!" called Grimes.

They came in—Swinton, and the burly, redhaired Calhoun, Chief Mannschenn Drive Engineer, and scrawny, balding McHenry, Chief Reaction Drive Engineer. They were followed by the gangling, dreamy Mayhew, Psionic Radio Officer, by little, fat Petersham, the Purser, and by the yellow-haired, stocky Karen Schmidt. Then came Todhunter, the dapper little Surgeon, accompanied by Renfrew, the Survey Service Lieutenant in charge of the modified Carlotti gear.

They disposed themselves on chairs and settees, adjusted their seat straps with practiced hands.

"You may smoke," said Grimes, filling and lighting his own battered pipe. He waited until the others' pipes and cigars and ciagarettes were under way, then said quietly, "None of you need to be told that this is not a commercial voyage." He grinned. "It is almost like a return to the bad old days of piracy. We're like the legendary Black Bart, Scourge of the Spaceways, just cruising along waiting for some fat prize to wander within range of our guns. Not that Black Bart ever went ghost hunting...."

"He would have done, sir," put in Swinton, "if there'd

been money in it."

"There's money in anything if you can figure the angle," contributed McHenry.

This was too much for Sonya Verrill. "I'd have you gentlemen know," she said coldly, "that the question of money doesn't enter into it. This expedition is classed as pure scientific research."

"Is it, Commander Verrill?" Grimes' heavy eyebrows lifted sardonically. "I don't think that we should have had the backing either of your Government or of ours unless some far-

sighted politicians had glimpsed the possibility of future profits. After all, trade between the Alternative Universes could well be advantageous to all concerned."

"If there are Alternative Universes," put in Calhoun.
"What do you mean, Commander? I specified that the
personnel of this ship was to be made up of those who have
actually sighted Rim Ghosts."

"That is so, sir. But we should bear in mind the possibility—or the probability—that the Rim Ghosts are ghosts—ghosts, that is, in the old-fashioned sense of the word."

"We shall bear it in mind, Commander," snapped Grimes. "And if it is so, then we shall, at least have made a small contribution to the sum total of human knowledge." He drew deeply from his pipe, exhaled a cloud of blue smoke that drifted lazily towards the nearest exhaust vent. "Meanwhile, gentlemen, we shall proceed, as I have already said, as though we were a pirate ship out of the bad old days. All of you will impress upon your juniors the necessity for absolute alertness at all times. For example, Commander Swinton, the practice of passing a boring watch by playing threedimensional noughts and crosses in the plotting tank will cease forthwith." Swinton blushed. This had been the habit of his that had aroused the ire of the Master and the Chief Officer of Rim Mastodon, "And, Commander Calhoun, we shall both of us be most unhappy if the log desk in the Mannschenn Drive Room is found to be well stocked with light reading matter and girlie magazines." It was Calhoun's turn to look embarrassed. "Oh, Commander McHenry, the Reaction Drive was in first class condition when we blasted off from Port Forlorn. A few hours' work should suffice to restore it to that condition. I shall not expect to find the Reaction Drive Engine Room littered with bits and pieces that will eventually be reassembled five seconds before planetfall." The Surgeon, the Purser and the Catering Officer looked at each other apprehensively, but the Commodore pounc-

ed next on the Psionic Radio Officer. "Mr. Mayhew, I know that it is the standard practice for you people to gossip with your opposite number all over the Galaxy, but on this voyage, unless I order otherwise, a strict listening watch only is to be kept. Is that understood?"

"You're the boss," replied Mayhew dreamily and then, realizing what he had said, "Yes, sir. Of course, sir. Very good, sir."

Grimes let his glance wander over Todhunter, Petersham and Schmidt, sighed regretfully. He said, "I think that is all. Have you anything to add, Commander Verrill?"

"You seem to have cleared up all the salient points insofar as your own officers are concerned," said the girl. "And I am sure that Mr. Renfrew is capable of carrying out the orders that he has already been given."

"Which are, Commander?"

"As you already know, sir, to maintain his equipment in a state of constant, manned readiness, and to endeavour to lock on to a Rim Ghost as soon as one is sighted."

"Good. In that case we all seem to know what's expected. We stand on, and stand on, until . . ."

"I still think, sir," said Calhoun, "that we should be carrying a Chaplain-one qualified to carry out exorcism."

"To exorcise the Rim Ghosts," Sonya Verrill told him, "is the very last thing that we want to do."

VII

THEY STOOD on . . .

And on.

Second by second, minute by minute, hour by hour the time was ticked away by the ship's master chronometer; watch succeeded watch, day succeeded day. There was normal Deep Space routine to keep the hands occupied, there

were the frequent drills—at first carried out at set times and then, as every officer learned what was expected of him, at random intervals—to break the monotony. But nothing was sighted, nothing was seen outside the viewports but the distorted lens of the Galaxy, the faint, far, convoluted nebulosities that were the sparse Rim stars.

Grimes discussed matters with Sonya Verrill.

He said, "I've been through all the records, and I still can't discover a pattern."

"But there is a pattern," she told him. "On every occasion at least one member of the group to sight a Rim Ghost has seen his own alternative self."

"Yes, yes. I know that. But what physical conditions must be established before a sighting? What initial velocity, for example? What temporal precession rate? As far as I can gather, such things have had no bearing on the sightings whatsoever."

"Then they haven't."

"But there must be some specific combination of circumstances, Sonya."

"Yes. But it could well be something outside the ship from which the ghost is sighted, some conditions peculiar to the region of Space that she is traversing."

"Yes, yes. But what?"

"That, John, is one of the things we're supposed to find out."

Grimes said, "You know, Sonya, I think that perhaps we are on the wrong track. We're trying to do the job with technicians and machinery..."

"So?"

"How shall I put it? This way, perhaps. It could be that the best machine to employ would be the human mind. Or brain."

"What do you mean?"

"That Calhoun may have something after all. It will not

surprise you to learn that I have, on microfilm, a complete dossier on every Rim Worlds' officer in this ship. I've been through these dossiers, hoping to establish some sort of pattern. As you know, every Rim Worlder in this ship has at least one Rim Ghost sighting to his name. Now, our Mr. Calhoun, or Commander Calhoun if you like—you recall his remarks at our first conference, just after we'd lined up for the Mellise sun?"

"I do. He was saying that the Rim Ghosts might be real—or should one say unreal?—ghosts."

"Yes. Anyhow, Calhoun was born on the Rim. On Ultimo, to be exact. But his parents were migrants. From Dunglass."
"Yes..."

"You know Dunglass?"

"I was there once. An odd world. Ruled by a theocracy . . . Or is 'theocracy' the right word? But the United Reformed Spiritualist Church runs the show, after a fashion."

"Probably as well as any other government on any other world. Anyhow, the U.R.S.C., as no doubt you know, has its share of heretics. Calhoun's parents were such. Apparently the house in which they lived was haunted, and they employed a bootleg exorcist to lay the ghost. This was frowned upon by the authorities, so much so that the Calhouns decided to emigrate. Now, one can be a heretic without being either an atheist or an agnostic. The Calhouns still believe, although reserving the right to believe in their own way. Their only son was brought up in their religion."

"And so what?"

"So-ignoring telepathy, telekinesis, teleportation and the like—what proportion of psychic phenomena is due to the activities of the dear departed, and what proportion is due to a ... leakage—from one Universe through to another?"

"H'm. I must confess that this was a line of approach that never occurred to me. I don't pretend to be an expert

on so-called psychic matters, but if we did hold a séance, shouldn't we require a medium?"

"We have one-Mr. Mayhew."

"Yes. But as you know, all these Rhine Institute graduates insist that there's nothing supernatural about their psionic talents. Furthermore, one can be telepathic without being clairvoyant."

"Can one, Sonya? I'm not so sure. There are quite a few recorded cases of clairvoyance, and many of them can be explained by telepathy. Even the premonitory ones can be accounted for by assuming the reception of a telepathic broadcast from a Universe with a slightly different Time Scale. There is no need to assume that the Rim Ghosts are a supernatural phenomenon. If we do pay lip service to one of the supernatural religions it will only be to create the right conditions for our own experiments."

She said, "You rank me, John, and you're in command of this ship and this expedition. But I still don't like it."

"You think that we're selling out, as it were, to the supernaturalists?"

"Frankly, yes."

"I don't see it that way. What is natural, and what is

supernatural? Can you draw a dividing line? I can't."

"All right," She unstrapped herself and got to her feet, the slight effort pushing her up and clear from the chair. She hung there, motionless, until the feeble gravitational field of her shoe soles pulled her back to the deck. Then, contact having been made with solidity, she flung her hands out in an appealing gesture. "Do what you can, John, any way you like. But do it. You've guessed how hard it was for me to persuade our top brass to pour time and money into what your Commander Swinton called a wild ghost chase. Unless we get results, there'll never be another one. And you know that I want results. And you know the sort of results I want." Her hands fell to her sides. "Only—only I've stood on my own

flat feet for so long that it rather hurts to have to call in outside assistance."

"It won't be outside assistance, Sonya. We shall be working with and through our own people, aboard our own ship. All that we shall be trying to do will be the creation of conditions favorable to a leakage from one Universe to another."

"As you say. As you say." She laughed briefly. "After all, men and women have been in the habit of selling their souls to the Devil from the very beginnings of human history. Or mythology." She paused. "No, history is the better word."

He said, exasperated, "But we won't be selling our souls to the devil. If it makes Calhoun any happier to think that he's gained a few converts to the odd faith of his parents, what does it matter?" He reached out for his telephone, pressed a numbered stud. "Mr. Mayhew? Commodore here. Can you spare me a moment?" He pressed another stud. "Commander Calhoun? Commodore here. Would you mind stepping up to my quarters?"

Sonya Verrill pulled herself back into her chair, buckled

herself in and she and Grimes sat back to wait.

Mayhew was first to arrive in Grimes' day cabin. He was untidy as always, his uniform shirt sloppily buttoned, one shoulderboard hanging adrift, his wispy gray hair rumpled, his eyes vague and unfocused. He stifled a yawn. "Yes, sir?"

"Take a seat, please, Mr. Mayhew." There was a sharp rap at the door. "Come in!"

Calhoun entered, somewhat ostentatiously wiping his hands on a piece of waste. He, too, was told to be seated.

"Commander Calhoun," said Grimes, "I believe that you were brought up in the beliefs of the United Reformed Spiritualist Church?"

"No, sir." The engineer's reply was a stressed negative. "No,

sir. I was brought up in the beliefs of the United Primitive Spiritualist Church." He seemed to realize that his answer had caused a certain confusion in Grimes' mind, so went on, "You will know something of Dunglass, sir. You will know that there were people, my parents among them, who advocated a return to the old beliefs, the old, the only true faith. The right to exorcise, for example . . ."

"Yes, Commander. I understand. But you believe in the existence of the Rim Chosts?"

"Of course, sir—although it has yet to be determined if they are good or evil manifestations. If they are evil, then exorcism should be practiced."

"Yes, of course. As you are well aware, most of us in this ship do not hold the same views as yourself regarding the phenomena of the Rim Chosts. But you will agree that it is desirable that contact be made with one or more of the apparitions—after all, this is the purpose of this expedition. And if such contact is made . . ." Grimes paused. "If such contact is made, it might well be to the advantage of your church."

"That is so, sir."

"Perhaps you might help us to make such a contact."
"How, sir? I do not think that tampering with the Drive controls will achieve any useful result."

"That was not in my mind. But it had occurred to me, Commander, that there are certain rites practiced by your Church..."

"A séance, you mean, Commodore? But I have no mediumistic talents. If such had been the case I should not be here now; I should have entered our priesthood."

"But you know the drill?"

"Yes, sir. I am conversant with the rites and ceremonies. But without a medium they are valueless."

"Here is our medium," said Grimes, nodding towards the almost asleep Mayhew.

The Psionic Radio Officer jerked awake. "Come off it!" he ejaculated. "I'm a technician, not a cheap fortune teller!" Then, "I beg your pardon, sir. What I meant to say is that the Rhine Institute has always been opposed to superstition."

"Religion is not superstition, you half-witted teacup reader!" shouted Calhoun.

"Gentlemen, gentlemen . . ." soothed Grimes. "Need I remind you that we are under Naval discipline, and that I could order you, Commander Calhoun, to organize a séance, and you Mr. Mayhew, to officiate as medium?"

"Even in the Navy, sir," said Calhoun, his freckles standing out sharply against the suddenly white skin of his face, "there are lawful and unlawful commands."

"And," Grimes told him coldly, "bearing in mind the peculiar purpose of this expedition, such a command made by myself would be construed as lawful by the Board of Admiralty. But many centuries ago, back in the days when navies were made up of wooden ships sailing Earth's seas, there used to be a saying: 'One volunteer is worth ten pressed men.' Surely, Commander, you will not hesitate to volunteer to play your part in an experiment that, when made public, could well result in a flood of converts to your faith?"

"If you put it that way, sir. But . . . "

"And surely, Mr. Mayhew, you will not hesitate to play your part? After all, it could well lead to a Fellowship of your Institute...."

"But, sir, the superstition . . . "

"If you dare to use that word again, Mayhew . . ." threatened Calhoun.

"Commander! Pease remember where you are. And Mr. Mayhew, I am asking you to respect Commander Calhoun's beliefs. If that is ineffective I shall order you to do so-with the usual penalties if the order is willfully disobeyed."

The pair of them lapsed into a sulky silence.

Grimes went on, "I shall leave matters in your hands, Commander. You are the only person in the ship qualified to carry out the necessary organization. And you, Mr. Mayhew, will co-operate fully with Commander Calhoun." He smiled briefly. "And now, gentlemen, perhaps a little refreshment before you engage yourself upon what are, after all, somewhat unusual duties. . . ."

When they were gone, mellowed by the alcohol, almost friendly towards each other, Sonya Verrill said, "The big stick and the carrot . . . I hope the combination gets results."

"I hope it gets the results we want," replied Grimes. "We don't want to raise any ghosts of the wrong sort."

"No," whispered Sonya, her face suddenly pale and strained. "No."

VIII

The preparations for the séance took much longer than Grimes had anticipated. But it was obvious that Calhoun, religiously as well as professionally, was a perfectionist. The most time-consuming operation was the construction of a harmonium, during which the wardroom piano was cannibalized for its keyboard, this being cut down from seven and a half octaves to five. The engineers' workshop was able to turn out the necessary bellows and treadles, and the brass vibrators or "reeds." The ivory from the surplus keys was utilized in the manufacture of the various stops. Grimes, watching with interest the fabrication of the archaic instrument, listening wincingly to the caterwauling notes of its intitial tests—"We must get the right wheezing quality . . ." insisted Calhoun—was inclined to deplore the sacrifice of what had been a well-cared-for and versatile music maker,

the life and soul of many a good party during previous expeditions in *Faraway Quest*. But the séance had been his idea initially, so he felt that he had no right to criticize.

Then the wardroom was stripped of its fittings. The comfortable, well padded chairs were removed and replaced by hard metal benches. The paneling was covered by dingy gray drapes—bedsheets that had been passed through a dye concocted from peculiar ingredients by Dr. Todhunter and Karen Schmidt. Dimmers were fitted to the light switches, and some of the fluorescent tubes were removed and replaced by bulbs giving a peculiarly dingy red illumination. And there were other accessories to be made: A tin speaking trumpet, and a tambourine, both of which were decorated with lines and blobs of luminous paint.

At last everything was ready.

Grimes sent for his First Lieutenant, "Commander Swinton," he said, "we shall hold our séance at 2100 hours this evening, ship's time. Please see to it that all departments are notified."

"Ay, ay, sir."

"And wipe that silly grin off your facel"

"Sorry, sir. But you must admit that after that toast, when we spliced the mainbrace, this is turning out to be a wilder ghost chase than any of us anticipated."

"From Commander Calhoun's viewpoint it's somewhat less wild than it was, Swinton. As far as he's concerned we're dropping all the scientific flummery and returning to the primitive methods, the tried and trusted methods, of his religion. And all the evidence indicates that these methods do work, after a fashion. They create the right atmosphere. They raise—something. From inside, a release of the wild talents possessed by those present at the séance? From Outside? From the next Time Track but three? I don't know, Swinton. I don't know—yet."

"It will be an interesting experiment."

"Yes. And I'm pleased that Mr. Mayhew has been persuaded to look at it in that light."

"I suppose that he has got mediumistic talents, sir?"

"He must have, Swinton. What is a medium but a telepath?"

"Could be, sir. Could be. But . . . "

"Don't say that Commander Calhoun has converted you?"

"He's tried hard enough, sir. Oh, I'm willing to believe that his Church, in either the Primitive or the Reformed versions, has produced some interesting phenomena, but I've yet to be convinced that they're supernatural, any more than the Rim Ghosts are. I can't understand why the Rhine Institute hasn't done more to investigate Spiritualism."

"Because, my boy, it hasn't been allowed to. It's scientific. Every time that one of its investigators sniffs around a Spiritualist Church he's given either the cold shoulder or the bum's rush. You know the line of talk—"There are some things that we aren't meant to know. Faith is all-important; knowledge is a device of the Devil.' And so on. And so on."

"Then I'm surprised that Calhoun was among the volunteers for this expedition."

"You shouldn't be. Commander Calhoun has an axe to grind. He hopes that something will be discovered that will be useful to his Primitive Church in its squabble with the Reformed Church. Exorcism by remote control, for example..."

"But that would be dragging in Science".

"As a servant, not as a competitor."

"I think I see . . ." The young man still looked dubious, however. "Will that be all, sir?"

"Yes, thank you, Commander Swinton . . . Oh, just one more thing. As soon as this . . . experiment is over, please get the wardroom looking like a wardroom, and not like a down-at-heels meeting house."

"That, sir, will be a pleasure."

Grimes dined in his own quarters that night—the wardroom, as it was at this time, was far too comfortless. Sonya
Verrill kept him company. They enjoyed their meal together.
Although it was simple it was well cooked and nicely served,
and the wines from the Commodore's private stock were an
excellent accompaniment to the food. While they were eating
they chatted about minor matters and listened to the background music softly tinkling from Grimes' playmaster.

And then, after Grimes had produced two bulbs of vintage port and a box of fine cigars imported from Caribbea, they talked more seriously.

She said, "I hate to admit it, John, but I'm rather frightened."

"You, of all people? Why, Sonya?"

"As long as this expedition was being run on scientific lines it was . . . How shall I put it? It was, in spite of my own private reasons for being here, fun. Something in it, as you said, of the old days of piracy—but only playing at pirates. A Carlotti beacon instead of a real gun or laser projector, and a sort of atmosphere about it all of, "Bang! You're dead!" But now . . . As I told you, I've been on Dunglass. It's a dreary world, with cities that are no more than straggling towns, streets and streets of mean little houses and Meeting Halls that are just sheds designed, one would think, with a deliberate avoidance of pleasing proportion. And the feeling all the time that one is being watched, disapprovingly, by the ghosts of all the countless millions who have gone before.

"I went to one or two of their services. Partly out of curiosity, and partly because it was my job, as an Intelligence Officer. Cold, cold halls—with a chill that didn't seem to be natural—and dreary hymn singing by drab people, and dim lights, and a voice that seemed to come from nowhere giving adivce about the most trivial matters—and some that weren't so trivial....

"Yes, I remember it well. There was this voice-a man's voice, deep, although the medium was a skinny little woman. The man sitting next to me whispered that it was Red Eagle, a Spirit Guide. He went on to say that this Red Eagle was, or had been, a Red Indian, an American Indian. I wondered what Red Eagle was doing so many light years away from home, but it occurred to me that Time and Space, as we know them, probably mean nothing to spirits, so kept quiet. The voice said, 'There is a stranger here tonight, a woman from beyond the sky.' Well, most of those present must have known who I was. The voice went on, 'I have a message for the stranger. I see a ship. I see a ship falling through the emptiness, far and far away . . .' Once again, so what? I was a spacewoman and it was no secret. Far away, far away, where the stars are few and dim, far and few . . . And I see the name of the ship, in gold letters on her prow . . . I can read the name . . . Outsider . . . ' And that meant nothing to me-then. I see the Captain, brave in his black and gold. You know him. You will know him again . . . And then there was a description of the Captain's appearance, and I knew that it was Derek Calver. As you are aware, I first met Derek when he was Second Mate of the old Lorn Lady. 'There is another man. He is one of the officers, although he, too, has been a Captain. He is afraid, and he is disgraced, and he is locked in his cabin . . . And once again there was the description-even to the laser burn on the left buttock and the funny little mole just above the navel. It was Bill all right. Bill Maudsley. 'He is sick, and he is afraid, and you are not with him, and he knows that he has lost you forever. There is a bottle, and he drinks from it, and the spilled fluid drifts around the air of the cabin in a mist, in a spray. He looks at the empty bottle and curses, then smashes it on the wall. The broken, splintered neck is still in his hand, and he brings the sharp, jagged end of it across his throat . . .'

"I just sat there, in a sick, numb silence. I wanted to ask questions, but I couldn't in front of all those strangers. But there was nothing more. Nothing at all. Red Eagle had said his piece as far as I was concerned, and passed on all sorts of trivial messages to other members of the congregation. Billy Brown's grandmother was concerned because he wasn't wearing his long underwear, and Jimmy Smith's Aunt Susan wanted to tell him that trade would pick up next year, and so on, and so on.

"After the . . . meeting? Service? After the service I stayed on to have a talk with the minister. He was very sympathetic, and arranged for me to have a private sitting with the medium. It wasn't very satisfactory. Red Eagle seemed to be somewhat peeved at being called away from whatever it was that he was doing, and just told me that I should search long and far, and that I should and should not find that for which I was searching.

"And what can be made of that?

"Shall I succeed in my search by becoming a ghost my-self, before my time? I hope not. I'm too fond of life, John—life on this gross physical plane. I like good food and wine and tobacco and books and music and clothes and . . . and all the other things that make life, in spite of everything, so well worth living. There's far too much vagueness about what comes after. Oh, there are the stock protestations—'It is very beautiful here, and everybody is happy . . .'—but . . . It could be faulty transmission and reception, but I always get the impression that the After Life is lacking in character, and color and, but of course, the good, lusty pleasures of the flesh . . .

"Even so, I was shaken. Badly shaken."

"It could be explained by telepathy, Sonya."

"No, John, it couldn't be. I was not thinking about Bill Maudsley at the time-not until that message came through, and even then I was thinking only about Derek Calver.

I didn't know that Bill had shipped as his Mate. And as for . . . And as for the shocking manner of his death, that I did not know about. I did not know about it officially for a matter of months, which was the time it took for the news to drift in from the Rim. But I checked up. I ran all available data through one of our Master Computers, and got one of our Specialist Navigators to run his own check, and there were no two ways about the answer. Bill must have taken his own life at the very time that I was sitting in that dreary Meeting Hall in Doylesville, on Dunglass. . . ."

"It might be as well if you didn't attend the séance, Sonya,"

Grimes told her.

"And leave the show to you lousy secessionists?" she flared, with a flash of her old spirit. "No sir!"

IX

WHEN GRIMES and Sonya Verrill went down to the wardroom they found that all was in readiness for the séance.
The uncomfortable benches—it was fortunate, thought the
Commodore, that the ship was falling free so that the only
contact between buttocks and an unyielding surface was
that produced by the gentle restriction of the seat belts—
had been arranged in rows, facing a platform on which
were a table, three chairs and the harmonium. Calhoun,
contriving to look like a nonconformist minister in spite of
his uniform, occupied one of the chairs at the table. Mayhew,
his usual dreaminess replaced by an air of acute embarrassment, sat in the other. Karen Schmidt was seated at the
musical instrument.

As soon as the Commodore and Sonya had taken a bench in the front row the engineer, unbuckling his seat belt, got carefully to his feet. His voice, as he made the initial announcement, was more of a street corner bray than a pulpit

bleat. "Brethren," he said, "we are here as humble seekers, gathered in all humility, to beg that our loved ones on the Other Side will shed light on our darkness. We pray to Them for help—but we must, also, be prepared to help Them. We must cast out doubt, and replace it by childlike faith. We must believe." He went on in a more normal voice, "This, I assure you, is essential. We must put ourselves in a receptive mood, throwing our minds and our hearts open to the benevolent powers on the other side of the veil . . ." Then, the engineer briefly ascendant over the lay preacher, "We must strive to create the right conditions insofar as we are able . . ."

Meanwhile, one of his juniors was making his way along the tiers of benches distributing mimeographed sheets. Grimes looked at his curiously. It was, he saw, a hymnal.

"Brethren!" cried Calhoun, "we will join in singing the first hymn."

Karen Schmidt was having trouble with the harmonium—the operation of treadles in the absence of a gravitational field requires a certain degree of concentration. At last, however, she got the thing going and suddenly and shockingly the introductory chords blared out.

Then they were all singing to the wheezing, gasping accompaniment:

"Lead, Kindly Light, amid the encircling gloom,

"Lead Thou me on . . . "

The hymn over, Calhoun prayed. Although himself an agnostic, Grimes was impressed by the sincerity of the man. He began to wish that he could believe in something.

There was another hymn, and then the lights were dimmed until only the dull-glowing red globes remained. The lines and blobs of luminous paint picking out the simple apparatus—the speaking trumpet and the tambourine—on the table gleamed eerily. Suddenly it was very quiet in the wardroom; the muted noises of machinery, the sobbing of

pumps and whizzing of fans, the thin, high keening of the Mannschenn Drive, accentuated the silence rather than diminished it. It was very quiet—and very cold.

Physical or psychological? Grimes asked himself as he shivered.

His eyes were becoming accustomed to the almost-darkness. He could see the dark forms of Calhoun and Mayhew, sitting motionless at the table, and Karen Schmidt hunched over the harmonium. He turned his head to look at Sonya. Her face was so pale as to seem almost luminous. He put out his hand to grasp hers, gave it a reassuring squeeze. She returned the pressure, and seemed reluctant to relinquish the physical contact.

Mayhew cleared his throat. He said matter-of-factly, "There's something coming through..."

"Yes?" whispered Calhoun. "Yes?"

Mayhew chuckled. "It's only a routine message, I'm afraid. Flora Macdonald . . ."

"But you must have heard of her," insisted Calhoun in a low voice. "She lived in the eighteenth century, on Earth. She was a Jacobite heroine. . . ."

Mayhew chuckled again. "Not this Flora Macdonald. She's a Waverley Royal Mail cargo liner, and she's off Nova Caledon . . . All the same, this is remarkable range I'm getting, with no amplifier. It must be that the brains of all you people, in these somewhat peculiar circumstances, are supplying the necessary boost. . . ."

"Mr. Mayhew, you are ruining the atmosphere!"

"Commander Calhoun, I consented to take part in this experiment on the understanding that it was to be treated as an experiment."

Something tinkled sharply.

At the table, forgetting their disagreement, Calhoun and Mayhew were staring at the tambourine. Grimes stared too, saw that something had broken its magnetic contact with

the steel surface, that it had lifted and was drifting, swaying gently, carried by the air currents of the ventilation system.

But the exhaust ducts were in the bulkhead behind the platform, and the thing, bobbing and jingling, was making its slow, unsteady way towards the intake ports, on the other side of the wardroom.

Grimes was annoyed. This was no time for practical jokes. Telekinesis was an uncommon talent, for some reason not usually found among spacemen, but not so uncommon as all that. There was, the Commodore knew, one telekineticist in Faraway Quest's crew—and he would be on the carpet very shortly.

But . . .

But he was the Third Mate, and he was on watch and, in any case, all the tests that he had undergone had proven his incapability of any but the most trivial telekinetic feats.

So this, after all, was no more than some freak of air circulation.

The harmonium wheezed discordantly.

Calhoun was on his feet, furious. "Can't you people take things seriously? This is a religious service! Miss Schmidt, stop that vile noise at once! Stop it, I say! Lights, somebody! Lights!"

The incandescent tubes flared into harsh brillance. The tambourine steadied and hung motionless, and then behaved in the normal manner of a small object floating loose in Free Fall, drifting very slowly with the air current towards the exhaust ducts. But at the harmonium Karen Schmidt still twitched and shuddered, her feet erratically pumping, her hands falling at random on the keyboard. Her eyes were glazed and her face vacant; her mouth was open and little globules of saliva, expelled by her stertorous breathing, hung about her jerking head in a glistening cloud.

Grimes unsnapped his seat belt and got to his feet. "Dr. Todhunter! See to Miss Schmidt, will you?"

But all Calhoun's anger had evaporated.

"No!" he shouted. "No! Be seated, everybody!"

"Like that woman," Sonya Verrill was whispering tensely.
"Let me pass!" It was Todhunter, trying to make his way through the packed rows of benches. "Let me pass."

And then Karen Schmidt spoke.

But it was not with her own voice. It was with the voice of a man-deep, resonant. At first the words seemed to be an unknown language—a strange but hauntingly familiar tongue. And then, with a subtle shift of stress and tempo, they were understandable.

"Falling . . . falling . . .

"Through the night and through the nothingness you seek and you fall . . .

"But I am the onlooker; I care not if you seek and find, if you seek and fail.

"I am the onlooker."

Calhoun was taking charge. "Who are you?"

"I am the onlooker."

"Have you a message?"

"I have no message." There was laughter that seemed to come from nowhere and everywhere. "Why should I have a message?"

"But tell us. Shall we succeed?"

"Why should I tell you? Why should you succeed? What is success, and what is failure?"

"But there must be a message!" The initial awe in Calhoun's voice was being replaced by exasperation. Grimes was reminded of those primitive peoples, sincere believers, who maltreat the images of their gods should those deities fail to deliver the goods.

Again the uncanny laughter. "Little man, what message do you want? Would you know the day and hour and man-

ner of your death? Would live the rest of your life in fear and trembling, striving to evade the unavoidable?" The hands of the medium swept over the keyboard, and the instrument responded—not discordantly, not wheezingly, but with the tones of a great organ. And the music was the opening bars of the "Dead March" in Saul. "Is this the message you crave?"

Sonya Verrill, standing stiff and straight, cried, "Is this all you have for us? Is that the limit of your powers—to tell us all what we know already, that some day we must die?"

For the last time there was the sound of laughter, and the voice said quietly, "Here is your message."

And then came the shrilling of the alarm bells, the repetition of the Morse symbol A, short long, short long, short long...

Action Stations.

X

SHE HUNG there on Faraway Quest's port beam, matching velocity and temporal precession rate, a big ship, conventional enough in design, nothing at all strange about her, except that both radar and mass proximity indicator screens remained obstinately blank. Already the oddly twisted directional antenna of the Quest's Carlotti apparatus was trained upon her, like the barrel of some fantastic gun, already the whine of the emergency generators, feeding power into the huge solenoid that was the ship, was audible over and above the still ringing alarm bells, the sounds of orderly confusion.

"Nothing showing on the screens, sir," the Third Officer was reporting. "And the transceiver is dead."

Swinton was already at the huge mounted binoculars.

He muttered, "I think I can read her name . . . Rim Ranger . . ."

"And that," said Grimes, "is what I had in mind for the next addition to our fleet. . . . Interesting . . . "

"Call her on the lamp, sir?"

"No. If all goes well we shall soon be able to communicate through the usual channels. Ready, Mr. Renfrew?"

"Ready and standing by, sir," answered the Survey Service lieutenant.

"Good." And then Grimes found that he was groping for words in which to frame his order. He had almost said, "Fire!" but that was hardly applicable.

"Make contact!" snapped Sonya Verrill.

Renfrew, strapped into his seat at the controls of his apparatus, did look like a gunner, carefully laying and training his weapon, bringing the target into the spiderweb sights. One of his juniors was snapping meter readings: "Red twenty five, red fifty, red seventy five, eighty five . . . Red ninety, ninety-five . . . six . . . seven . . . eight . . . nine. . ."

There was a long pause and the men around the modified Carlotti gear were muttering among themselves. Swinton, who was still watching the other ship, announced, "She's flashing. Morse, it looks like . . ."

"Stand by!" shouted Renfrew. "Now!"

The Carlotti gear whined intolerably, whined and crackled, and the men serving it sneezed as arc-engendered ozone stung their nostrils. There was tension, almost unbearable strain, a psychological rending—and Grimes realized that he was seeing double, that every person, every piece of apparatus in the control room was visually duplicated. But it was more than a mere visual duplication—that was the frightening part. One image of Swinton was still hunched over the eyepieces of the binoculars, the other had turned to stare at Renfrew and his crew. One image of Renfew still had both hands at the console of his apparatus, the other

had one hand raised to stifle a sneeze. And there was a growing confusion of sound as well as of sight. It was—the old, old saying flashed unbidden into Grimes' mind—an Irish parliament, with everybody talking and nobody listening.

And it was like being stretched on a rack, stretched impossibly and painfully—until something snapped.

The other ship, Rim Ranger, was there still, looming large in the viewports, close, too close. A voice—it could have been Swinton's—was yelping from the transceiver, "What ship?" Then, "What the hell are you playing at, you fools?"

Grimes realized that he was in the Captain's chair, although he had no recollection of having seated himself. His own control console was before him. There was only one way to avoid collision, and that was by the use of rocket power. (And he had given strict orders that the Reaction Drive was to be kept in a state of readiness at all times.) There was a microsecond of hesitation as his hand swept down to the firing key—the jettison of mass while the Mannschenn Drive was in operation could have unpredictable consequences. But it was the only way to avoid collision. Even with the solenoid cut off there was enough residual magnetism to intensify the normal interaction due to the gravitational fields of the two vessels.

But he was gentle, careful.

From aft there was only the gentlest cough, and acceleration was no more than a nudge, although heavy enough to knock unsecured personnel off balance and tumble them to the deck.

And outside the viewports there was nothing—no strange ship, no convoluted, distorted Galactic lens, no dim and distant luminosities.

This was the Ultimate Night.

XI

Some hours later they came to the unavoidable conclusion that they were alone in absolute nothingness. Their signaling equipment—both physical and parapsychological—was useless, as were their navigational instruments. There was nobody to talk to, nothing to take a fix on. Presumably they were still falling free (through what?)—still, thanks to the temporal precession fields of the Drive, proceeding at an effective velocity in excess of that of light. But here—wherever here was—there was no light. There was no departure point, no destination.

After conferring with his senior officers Grimes ordered the Mannschenn Drive shut down. They had nowhere to go, and there was no point in wasting power or in subjecting the complexity of ever-precessing gyroscopes to unnecessary wear and tear. And then he passed word for a general meeting in the wardroom.

That compartment was, of course, still wearing its drab camouflage as a meeting house. The tin speaking trumpet adhered to the surface of the table still; the tambourine clung to the bulkhead hard by one of the exhaust ducts. But this time it was Grimes who took the main platform seat, with Sonya Verrill at his side. Pale and shaken, still dazed after her involuntary mediumism, Karen Schmidt seated herself again at the harmonium. Grimes looked at her curiously, then shrugged. She might as well sit there as anywhere else.

He called the meeting to order. He said, "Gentlemen, you may carry on smoking, but I wish to point out that it may be some little time before we are able to lay in fresh supplies." He was grimly amused as he noticed Todhunter, who was in the act of selecting a fresh cigarette from his platinum case, snap it hastily shut and return it to his pocket. He went on, "Gentlemen, I accept the responsibili-

ty for what has happened. I know that the reduction of the ship's mass while the Mannschenn Drive is in operation may, and almost certainly will, have unpredictable consequences. I was obliged to throw away reaction mass. And now we don't know where—or when—we are."

Sonya Verrill interrupted him sharply. "Don't be silly, John. If you hadn't used the rockets there'd be no doubt as to our condition, or the condition of the people in the other ship. A collision, and none of us wearing suits . . ."

"She's right," somebody murmured, and somebody else muttered something about proposing a vote of confidence.

But this, thought Grimes, was no time to allow democracy to raise its head. He had nothing against democracy—as long as it stayed on a planetary surface. But in Deep Space there must be a dictatorship—a dictatorship hedged around with qualifications and safeguards, but a dictatorship none-theless. Too, he was not sure that he liked Sonya Verrill's use of his given name in public. He said coldly, "I appreciate your trust in me, but I do not think that any useful purpose would be served by putting the matter to the vote. As commanding officer I am fully responsible for this expedition." He allowed himself a brief smile. "But I am not omniscient. I assure you that I shall welcome any and all explanations of our present predicament, and any proposals as to ways and means of extricating ourselves from this . . ." he finished lamely, "mess."

Swinton, seated in the front row with the other departmental heads, started to laugh. It was not hysterical laughter. Grimes glared at the young officer from under his heavy brows, said icily, "Please share the joke, Commander Swinton."

"I'm sorry, sir, but it is rather funny. When we had the séance Miss Schmidt, at the console of that most peculiar poor man's organ, played on the white keys, and on the

black keys. But you, at your console, played in the cracks." "What do you mean, Commander Swinton?"

"That we're in one of the cracks. We jumped tracks, but when we tried to jump back we didn't make it. We fell into the crack."

"Very neat, Swinton," admitted Grimes. "A very neat analogy. We've fallen into the gulf between Universes. But how are we to climb out?"

"Perhaps Commander Calhoun could help. . . ." suggested Renfrew. "When we held the séance we got in touch with . . . something."

Karen Schmidt cried, "No! No! You've not had something utterly alien taking charge of your mind and your body. I have, and I'll not go through it again!"

Surprisingly Calhoun also showed a lack of enthusiasm. He said carefully, "That . . . entity was not at all helpful. If we had succeeded in making contact with one of the regular Guides, all would have been well. But we didn't. And I fear that should we succeed in getting in touch with that same entity we shall merely expose ourselves to further derision."

"Well?" asked Grimes, breaking the silence that followed Calhoun's little speech.

Once again the Survey Service lieutenant spoke up. "I see it this way, sir. The Mannschenn Drive got us into this mess, perhaps it can get us out of it. Although the fact that my own apparatus was functioning at the time has some bearing on it. But, putting it crudely, it boils down to the fact that the mass of the ship was suddenly reduced while two Time-twisting machines—the Mannschenn Drive and the Carlotti Beacon—were in operation. As you know, experiments have been made with both of them from the Time Travel angle; no doubt you have heard of Fergus and the crazy apparatus he set up on Wenceslaus, the moon of Carinthia. . . . Well, I shall want the services of the

Mannschenn Drive engineers and of everybody in the ship with any mathematical training. I think I know what we can do to get out of this hole, but it would be as well to work out the theory, as far as is possible, first."

"And what do you have in mind, Mr. Renfrew?" asked Grimes.

"Just this, sir. A duplication as far as possible of the conditions obtaining when, as your Commander Swinton puts it, we fell into the crack, but with those conditions reversed in one respect."

"Which is?"

"The running of the Mannschenn Drive in reverse."

"It can't be done," stated Calhoun flatly.

"It can be done, Commander, although considerable modification will be necessary."

"We can give it a go," said Swinton.

"Yes," agreed Grimes. "We can give it a go. But it is essential that nothing be done in practice until the theory has been thoroughly explored. I have no need to tell you that a reversal of temporal precession might well age us all many years in a few seconds. Or there is another possibility. We may be flung into the far future—a future that could be extremely unhospitable. A future in which the last of the suns of this Galaxy are dying, in which the worlds are dead. Or a future in which one of the non-humanoid races has gained supremacy—the Shaara, for example, or the Darshans. Oh, we maintain diplomatic relations with them, but they don't like us any more than we like them."

"Mr. Renfrew," said Sonya Verrill, "holds a Master's degree in Multi-Dimensional Physics."

"And I, Commander Verrill, hold a Master Astronaut's certificate. I've seen some of the things that happen when a Mannschenn Drive unit gets out of control, and I've had firsthand accounts of similar accidents, and I've a healthy respect for the brute."

"But it is essential that no time be wasted," said Renfrew. "Why, Lieutenant? What Time is there in this . . . Limbo? Oh, there's biological time, but as far as air, water and food are concerned the ship is a closed economy. I regret that the bio-chemists failed to plant a cigarette tree in our 'farm,' but we still have the facilities for brewing and distilling."

"Then, Commodore, at least I have your permission to make a start on the math?"

"Of course."

Renfrew spoke half to himself. "To begin with, all three executive officers are qualified navigators. There is no reason why, with two of them working in their watches below, the third one should not do his share of the calculations."

"There is a very good reason why not," remarked Swinton.

"Indeed, Commander? I was forgetting that in spite of your status as a Reserve Officer you are really a civilian. Would that be breaking your Award, or something equally absurd?"

Swinton flushed, but replied quietly. "As long as we are serving in what, legally speaking, is a Rim Worlds warship, governed by the Articles of War, we are not civilians. My point is this—that it is essential that a good lookout be kept at all times, by all means. The officer of the watch must be fully alert, not tangled up in miles of taped calculations spewing from the control room computer."

"But we're in absolute nothingness," growled Renfrew. "Yes, but . . ."

"But we're in a crack," finished Grimes for him, feeling a childish happiness at having beaten his First Lieutenant to the draw. "And all sorts of odd things have the habit of falling into cracks!"

XII

Faraway Quest fell through the nothingness, drifting from nowhere to nowhere, a tiny bubble of light and heat and life lost in an infinite negation. Her electronic radio apparatus was useless. And Mayhew, the Psionic Radio Operator, crouched long hours in his cabin, staring into vacancy and listening, listening. He resorted to drugs to step up the sensitivity of both himself and the dog's brain that was his organic amplifier, but never the faintest whisper from Outside disturbed the telepath's mind.

And the work went on, the laborious calculations that, even with the ship's computers fully employed, took days, longer in the programing than in the actual reckoning. There were so many variables, too many variables. There were so many unknown quantities. There were too many occasions when the words Data Insufficient were typed on the long tapes issuing from the slots of the instruments.

And Grimes, albeit with reluctance, held himself aloof from the activity. He said to Sonya, "Why keep a dog and bark yourself?" But he knew that he, at least, should be free to make decisions, to take action at a second's notice if needs be. He was grateful that the woman was able to keep him company. She, like himself, could not afford to be tied down. She was in command of the Survey Service personnel and directly subordinate to the Commodore insofar as the overall command of the expedition was concerned. And there were administrative worries too. Tempers were beginning to fray. The latent hostility between members of different services, and between members of different departments, was beginning to manifest itself. And as Grimes knew full well, unless something happened soon there would be other worries.

They were castaways, just as surely as though they had

been the crew and passengers of a ship wrecked on some hitherto undiscovered planet. There were thirty of them: eight Survey Service officers, twenty two Rim Worlds Naval Reservists. Of the thirty, eight were women. As long as this had been no more than a voyage—not a routine voyage, to be sure, but a voyage nonetheless—sex had not been a problem. As long as all hands were fully occupied with mathematical work and, eventually, the modifications of the Mannschenn Drive, sex would not be a problem. But if every attempt to escape from the crack in Time failed, and if the ship were to drift eternally, a tiny, fertile oasis in a vast desert of nothingness, then something would have to be done about it. Spacemen are not monks, neither are spacewomen nuns.

"We may have to face the problem, Sonya," said Grimes worriedly as the two of them, cautiously sipping bulbs of Dr. Todhunter's first experimental batch of beer, talked things over.

She said, "I've already been facing it, John. The disproportion of the sexes makes things awkward. Oh, I know that in one or two cases it doesn't matter—my own Sub-Lieutenant Patsy Kent, for example. But even if she doesn't draw the line at polyandry, there's no guarantee that her boy-friends will take kindly to it."

He said, "We may be crossing our bridges before we come to them, if we ever do come to them. But that's one of the things that a commanding officer is paid for. It looks as though we may have to devise some workable system of polyandry...."

"Include me out," she said sharply. "By some people's standards I've led a far from moral life, but I have my own standards, and they're the most important as far as I'm concerned. If the microcosmic civilization aboard this ship degenerates to a Nature red in tooth and claw sort of set-up, then I'm looking after Number One. The best bet will be to

become the private, personal popsy of the Old Man of the tribe."

He looked at her carefully as she sat there in the armchair, contriving to loll even in conditions of Free Fall. She was wearing uniform shorts and her smooth, tanned legs were very long, and her carelessly buttoned shirt revealed the division between her firm breasts. He looked at her and thought, The Old Man of the tribe . . . But it's a figure of speech only. I'm not all that old. He said drily, "I suppose that rank should have its privileges. And if I'm the Old Man of my tribe, then you're the Old Woman of yours."

She said, "You flatter me, sir."

He said, "In any case, all this talk is rather jumping the gun. Your Mr. Renfrew and my own bright boys may come up with the answer."

She said, "They may not-and a girl has to look after herself."

He murmured, more to himself than to her, "I wish that there were some other reason for your . . . proposition."

She laughed, but tremulously, "And do you really think that there's not, John?"

"But these are exceptional circumstances," he said. "I know your reasons for embarking on this expedition. There were two men in your life, in our own Continuum, and you lost both of them. You're hoping to find what you lost."

"And perhaps I have found it. We've been cooped up in this tin coffin together long enough now. I've watched you, John, and I've seen how you've reacted to emergencies, how you've kept a tight rein on your people without playing the petty tyrant. They all respect you, John, and so does my own staff. And so do I."

He said, a little bitterly, "Respect isn't enough."

"But it helps, especially when respect is accompanied by other feelings. It would help, too, if you were to regard me,

once in a while, as a woman, and not as Commander Verrill, Federation Survey Service."

He managed a grin. "This is so sudden."

She grinned back. "Isn't it?" And then she was serious again. "All right. I don't mind admitting that the jam we're in has brought things to a head. We may never get back again-either to our own Continuum or to any of the more or less parallel ones. We may all die if one of our bright young men does something exceptionally brilliant. But let's ignore the morbid-or the more morbid-possibility. Just suppose that we do drift for a fair hunk of eternity on our little, self-sustaining desert island. As you know, some of the old gaussjammers have been picked up that have been adrift for centuries, with the descendants of their original crews still living aboard them. . . .

"Well, we drift. You're the boss of your tribe, I'm the boss of my smaller tribe. Our getting together would be no more than a political alliance."

He said, "How romantic."

"We're rather too old for romance, John."

"Like hell we are."

He reached out for her, and she did not try to avoid him. He reached out for her, and as he kissed her he wondered how long it was since he had felt a woman's lips-warm, responsive-on his. Too long, he thought. And how long was it since he had felt the rising tide of passion and let the softly thunderous breakers (her heart and his, and the combined thudding loud in his ears) bear him where they would? How long since he had felt the skin-firm, resilient, silken-soft-of a woman, and how long since the heat of his embrace was answered with a greater heat?

Too long . . .

"Too long . . ." she was murmuring. "Too long . . ." Then was silent again as his mouth covered hers.

And outside the cabin was the ship, and outside the ship was the black nothingness. . . .

But there was warmth in the cabin, and glowing light, a light that flared to almost unendurable brilliance and then faded, but slowly, slowly, to a comforting glow that would never go out, that would flare again, and again. There was warmth in the cabin and a drowsy comfort, and a sense of security that was all wrong in these circumstances—and yet was unanswerably right.

Grimes recalled the words of the medium—or the words of the entity that had assumed control of her mind and body. "Through the night and through the nothingness you seek and you fall..."

And he and Sonya had sought, and they had found.

They had sought, and they had found—not that for which they were seeking—or had they? She had been seeking a lover, and he? Adventure? Knowledge?

But all that was worth knowing, ever, was in his arms. (He knew that this mood would evaporate—and knew that it would return.)

She whispered something. "What was that, darling?"

She murmured, "Now you'll have to make an honest woman of me."

"Of course," he replied. "Provided that the Federation taxpayers kick in with a really expensive wedding present."

She cast doubts on his legitimacy and bit his ear, quite painfully, and they were engaged in a wrestling match that could only have one possible ending when the alarm bells started to ring.

This time their curses were in earnest, and Grimes, pulling on his shorts, hurried out of the cabin to the control room, leaving Sonya to follow as soon as she was dressed.

But it made no sense, he thought, no sense at all—Action Stations in this all pervading nothingness.

XIII

GRIMES, WHOSE quarters were immediately abaft the control room, was in that compartment in a matter of seconds. He found there young Larsen, the Third Mate, and with him was Sub-Lieutenant Patsy Kent, of the Survey Service. Larsen flushed as he saw the Commodore and explained hastily, "Miss Kent was using the computer, sir..."

"Never mind that. What is the emergency?"

The officer gestured towards the globe of darkness that was the screen of the Mass Proximity Indicator. "I... I don't know, sir. But there's something. Something on our line of advance."

Grimes stared into the screen.

Yes, there was something there. There was the merest spark just inside the surface of the globe, and its range. . . . The Commodore flipped the switch of the range indicator, turned the knob that expanded a sphere of a faint light from the center of the screen, read the figure from the dial. He muttered, "Twelve and a half thousand miles . . ." and marveled at the sensitivity of this new, improved model. But the target could be a planetoid, or a planet, or even a dead sun. Somehow he had assumed that it was another ship, but it need not be. Twelve and a half thousand miles, and Faraway Quest's initial velocity before proceeding under Interstellar Drive had been seven miles a second. . . . (But was it still? Where was a yardstick?) Contact in thirty minutes, give or take a couple or three . . . But there should be ample time to compute the velocity of approach. . . .

The others were now in the control room: Swinton, and Jones, the Second Mate, and Renfrew. And Sonya. He could smell the faint, disturbing perfume of her and he asked himself, What am I doing here? He stared at the spark of

light, brighter now, and closer, with a certain resentment. Come off it, Grimes, he thought in self-admonishment, it's years since you were a rosy-cheeked, snotty, sulking hard because a call to duty interfered with your very first date....

"Your orders, sir?" Swinton was asking politely, yet with

a touch of urgency.

"Action Stations was sounded, and Action Stations it is. I take it that the laser projectors and the missile launchers are closed up?"

"They are, sir."

"Good. Mr. Jones, please work out velocity of approach and estimated time of contact. Mr. Renfrew, please use the Carlotti gear for the purpose for which it was originally invented and try to initiate radio communication. Mr. Larsen, get on the blower to Mr. Mayhew and shake him up. Tell him that there's something ahead—a ship? a planet?—and that I want to know if it has a crew, or a population." Then, to Swinton, "I shall be going below for a few seconds, Commander. If anything happens you will know where to find me."

He dropped down the axial shaft to his day cabin, went through to his lavatory cubicle and hastily tidied himself up. He dressed rapidly, but with care. If this were to be a first contact with some alien race he would, at least, try to look the part that he was playing, that of leader of an expedition of Earthmen into the Unknown. He snared an undergarment of filmy crystal silk that was drifting in the air currents, stowed it hastily in a convenient drawer. It was just possible that he would be entertaining guests shortly.

Then, back in the control room, he received the reports of his officers. Faraway Quest, they told him, was closing the target at twelve miles a second. (So it, whatever it was, was not hanging motionless in Space. Or was it?) It had now been picked up by the radar, and the indications were that it was a metallic structure, not overly large. Neither

electronic nor psionic radio had been able to establish contact.

So . . .

So was it a dead ship, a vessel that years—or centuries?—ago had fallen out of its own continuum, a ship whose crew had died, or whose descendants were no longer able to operate any of the machinery except what was essential for the maintenance of life? Or was it a ship in fighting trim manned by possibly hostile beings with itchy trigger fingers, maintaining a cautious silence until the Quest was within range of the homing missiles, the flickering laser beams?

The Commodore went to the telephone, pressed the selector stud. "Mr. Mayhew. We are closing the target. Do you hear anything?"

"No, sir."

"The target appears to be a ship. Suppose that her Captain has ordered radio silence, what then?"

"Any unshielded mind must radiate, sir. Only trained telepaths can establish and maintain an effective shield, but even then there is leakage, a gabble of scraps of nonsense verse, meaningless mathematical formulae and the like."

"So you think that there's nothing living there, Mayhew?"
"I'd bet on it, sir."

"I hope you're right." He snapped orders to the First Lieutenant. "Commander Swinton, take the controls, please. Match velocities with the target and maintain a range of one mile."

"Ay, ay, sir." And then Swinton, seating himself in the Master Pilot's chair, was snapping his own orders, his manner assured and competent, in startling contrast to his usual callow youthfulness.

Grimes, strapped into a convenient acceleration chair, watched the young man appreciatively. He heard the whine of the stabilizing gyroscopes and felt the vibration as the

ship was turned end for end—and it was odd for this maneuver to be carried out without, as a visual accompaniment, the drift of stars (even the few, faint stars of the Rim) across the viewports. And then, relatively speaking, the target was astern—astern, but still closing rapidly. Faraway Quest's rocket drive coughed briefly, and coughed again. The target was still closing—but slowly, slowly.

For the last time there was the subdued rumble of the rockets, the gentle pressure of deceleration, and Swinton announced, not without pride, "Target abeam, sir. Velocities matched. Range one-point-oh-five of a mile."

Grimes swiveled his chair so that he could look out of the viewports.

And outside there was nothing but blackness.

In a matter of seconds the probing beam of the search-light found the target.

It was a ship, but no ship such as any of those in the control room had ever seen. There was a long hull that looked as though the conventional torpedo shape had been sliced in two longitudinally. At one end of it there was what looked like an assemblage of control surfaces. Grimes, out of his chair and monopolizing the huge mounted binoculars, studied it carefully. There was a rudder, and there were two screw propellers. It could be, he thought, a lightjammer, similar to the ones that he himself had designed, capable of being handled in a planetary atmosphere like an airship. But the rudder was too small, and those propellers were too heavy and had too coarse a pitch to be airscrews.

But there were the lofty masts, one forward and one aft, protruding from the flat deck. . . . But that would be an unusual, and not very practicable arrangement of spars to carry a lightjammer's suit of sails. . . . And between the masts there was a structure, white-painted, that looked more

like a block of apartments, complete with balconies, than part of a ship. Roughly in the middle of this there was another mast. . . . No, decided Grimes, it wasn't a mast, it was too thick, too short. It, too, was white-painted, but with a black top, and carried a design in blue. Grimes studied it carefully, decided that it was supposed to be some sort of grapnel or anchor.

He relinquished the binoculars to Sonya Verrill. When she had had time to study the weird derelict he asked, "Well, Commander, what do you make of it?"

She replied doubtfully, "It could be a lightjammer, sir. But all those ports . . . It'd be hard enough to make a thing like that watertight, let alone airtight. . . ."

"H'm. But those ports seem to be on one half of the hull only, the half with all the odd superstructures. . . . Like half a ship, and half—something else . . . "

"After all, sir," put in Swinton, who had been studying the thing with a smaller pair of binoculars, "there's no reason why a spaceship should be symmetrical. As long as it never has to proceed through an atmosphere it can be any shape at all that's convenient."

"True, Swinton. True. But if that thing's designed for Deep Space only, why those screw propellers? Aerodynamically speaking it's a hopeless mess, and yet it's equipped for atmospheric flight...."

"But is it?" queried Sonya Verrill. "Those absurdly heavy screws with their fantastically coarse pitch . . ."

"So you've noticed too," said Grimes. "But on one of the giant planets, with a really dense atmosphere, they might be useful."

"But where's the planet?" asked Swinton.

"Come to that," countered Grimes, "where's our planet?" He added, "Who knows what odd combinations of circumstances threw us here, dropped us into this crack in Time? Who knows what similar combinations have occurred in the

past?" And then, in a whisper, "But we're such a long way from Earth . . ."

"Are we?" asked Renfrew. "Are we? What does the word 'dimension' means in this dimensionless Limbo?"

"So I could be right," said Grimes.

"What are you driving at, John?" demanded Sonya Verrill.
"I'd rather not say, yet. It's too fantastic." He turned to his
First Lieutenant. "I'll leave you to hold the fort, Swinton.
I shall take away the boarding party."

XIV

THEY ASSEMBLED in the after airlock of Faraway Quest: Grimes, and Sonya Verrill, and Jones, and Dr. Todhunter. They waited until they were joined by Calhoun and Mc-Henry. When the two senior engineers put in an appearance they were hung around with an assortment of tools that would have been impossible to carry in any appreciable gravitational field: hammers, and wrenches and pinch bars and burning equipment. All members of the party, of course, carried reaction pistols and, on Sonya Verrill's insistence, all were armed—Grimes with the heavy projectile pistol that he favored, the others with hand laser projectors. In addition, the Surgeon carried a small battery of cameras.

They put on their helmets and then Grimes, plugging the lead from his suit radio microphone into the telephone socket, ordered Swinton, in the control room, to evacuate the airlock. They watched the needle of the gauge drop slowly, finally coming to rest on Zero. And then the valve opened.

The strange ship hung out there in the absolute blackness, every detail picked out by the harsh glare of the searchlight. Her colors were bright, garish—the red that was almost purple, the broad band of pink paint, and then black,

and then the white of the superstructure and the yellow of that odd assemblage of spars, of masts and booms.

She looked, thought Grimes, out of context.

But to any dweller in this nothingness—if there were any such dwellers—Faraway Quest would look out of context too.

With an odd reluctance Grimes shuffled to the sill of the airlock door, made the little jump that broke contact between his magnetic boot soles and the steel deck. His reaction pistol was ready, and with economical blasts he jetted across the mile of emptiness. And then that odd-expanse of red-purple plating was before him—and with a sudden shift of orientation he had the sensation of falling towards it head first. He used his pistol to turn himself and then to brake his speed. His landing was gentle, his boot soles making contact with the metal with no more than the slightest of jars. They made contact and they held. So, he thought, this ship is made of iron, or steel. But if I am right, when she was built nobody had thought of using aluminum as a structural material, and plastics had not been dreamed of....

He felt the shock as Sonya Verrill landed beside him, and then Jones came in, and Todhunter, and the two engineers. Grimes waited until Calhoun and McHenry had sorted themselves out—hampered as they were by their equipment, they had fallen clumsily—and then led the way along the surface of painted metal.

It was not easy going.

A spaceman's shuffle is a quite effective means of locomotion over a perfectly flat and smooth surface—but when the surface is made up of overlapping, riveted plates the feet must, frequently, be lifted, and there is the fear that, with magnetic contact broken, a long fall through emptiness will ensue.

But they made progress, trudging towards a near horizon

that was a purple painted angle-bar, glowing dully against the blackness.

Todhunter called a halt, contorting himself so that his magnetic knee-pads touched the plating. He said, "This is odd. It looks like clumps of some sort of living organism growing on the plates. It's dead now, of course."

"What I expected," Grimes told him.

"What you expected, sir?"

"If and when we get back to Port Forlorn, Doctor, you must read a few of the books in my rather specialized library. . . . I remember that a bright young journalist from the Lorn Argus once did a feature article on it. She cooked up rather a neat title, From Dug-Out Canoe to Interstellar Liner."

"I don't understand, sir."

"Neither do I, Doctor. But those barnacles will keep. They've been keeping for one hell of a long time."

They negotiated the angle-bar-like a ridge, it was, like the ridge of a roof with a pitch of 45 degrees—and beyond it was more of the purple-painted plating, and beyond that a stretch of pink paint, and beyond that was the dull-gleaming black. Grimes stopped at the border between the two colors, looked down at an odd, white-painted design—a circle, bisected by a line that had at one end the letter L, at the other the letter R. And from the righthand end of this line was another line at right angles to it, and this was subdivided and lettered: TF, T, S, W, WNA....

"So this is—or was—one of our ships. . . ." Sonya Verrill's voice was faint yet clear in his helmet phones. "Of course, those letters could be odd characters from some utterly alien alphabet, but they don't look like it to me."

"They're not," Grimes told her. "The L and the R stand for Lloyds' Register. TF is Tropical Fresh, T is Tropical, S is Summer, W is Winter, and WNA is Winter North Atlantic."

"But what does it mean? And how do you know?"

"I know because the history of shipping—all shipping—has always fascinated me. I should have recognized this ship at first glance, but I did not, because she has no right here. (But have we?) But here she is, and here we are—and we're luckier than her people because we shall be able to survive even if we can't find our way back...."

And then, still in the lead, he was shuffling over the black-painted plating until he came to a section of white-painted rails. He threw his body forward, grasped the rails with his gloved hands. He remained in this position until he had once again oriented himself, until his "up" and "down" were the "up" and "down" of the long-dead people of the dead ship. He was looking into a promenade deck. There was the scrubbed planking, and ahead of him was white-painted plating, broken by teakwood doors and brass rimmed ports—and with dense, black shadows where the glare of the Quest's searchlights did not penetrate. With a nudge of his chin he switched on his helmet lantern; he would be needing it soon.

The wooden deck would effectively insulate his boot soles from the steel plating beneath it, so he made a scrambling leap from the rail to one of the open doorways, pulled himself into the alleyway beyond it. There were more doors—some open, some ajar and secured by stay hooks, some shut. Grimes waited until the others had joined him, then pulled himself along a sort of grab rail to the first of the partially open doors. His gloved fingers fumbled with the stay hook, finally lifted it. The door swung easily enough on its hinges, which were of polished brass.

He let himself drift into the cabin, the glare of his helmet light gleaming back at him from burnished metal, from polished wood. There was a chest of drawers, and there were two light chairs that seemed to be secured to the deck, and

other were two bunks, one above the other. The upper bunk was empty.

The Commodore stared sadly at the pair of figures in the lower bunk, the man and the woman held in place by the tangle of still-white sheets. He had seen Death before, but never in so inoffensive a guise. The bodies, little more than mummies, had been drained of all moisture by their centurieslong exposure to a vacuum harder even than that of normal interstellar Space, or even that of intergalactic Space, and yet lacked the macabre qualities of the true skeleton.

Todhunter's voice was hushed. "Do you think, sir, a photograph?"

"Go ahead, Doctor. They won't mind."

It's a long time, he thought, it's a long, long time since you minded anything. . . . But how did it come to you? Was it sudden? Did the cold get you first, or did you die when the air rushed out of your lungs in one explosive burst? He turned to look at Sonya, saw that her face was pale behind the visor of her helmet. He thought, We should be thankful. We were lucky. He said, "We shan't learn much by looking in the other cabins."

"Then where can we learn something?" asked Calhoun in a subdued voice.

"In the control room—although they didn't call it that." He led the way along alleyways—in some of which drifted dessicated bodies—and up companionways, careful all the time to maintain the sense of orientation adapted to the derelict. Through public rooms they passed, the glare of their helmet lanterns, broken up into all the colors of the spectrum, flung back at them from the ornate crystal chandeliers. And then, at last, they came out into the open again, on to a great expanse of planking on either side of which the useless lifeboats were ranged beneath their davits. All around them was the emptiness, and there was Faraway Quest, her search-

lights blazing, no more than a bright and lonely star in the black sky.

From handhold to handhold they made their way, following the Commodore, until they came to more ladders, leading to a bridge that spanned the fore part of the superstructure. In the center of this bridge was a house of varnished timber with big glass windows, and in the forward compartment of this house there was the body of a man. He was standing there, held in position by the grip of his hands on a big, spoked wheel, an ornate affair of polished wood and burnished brass. He was wearing an odd, flat blue cap, and a blue, wide-collared jumper, and blue trousers that were tucked into short black boots. The skeletal face stillafter how many centuries?-wore an expression of concentration as the eyes, no more than depressions in the taut skin, stared sightlessly at the compass, at the lubber's line that had not shifted a microsecond of arc from the quarter point in half a millenium. Eerily the card swung as Grimes looked at it, pulled away from its heading by the magnetic field generated by his suit transceiver.

Abaft the wheelhouse there was another compartment. In it were two men, both attired in uniforms that still, to a shipman, made sense. Grimes murmured, "Sorry, Captain," and gently lifted the body of the tall, thin man, the almost-skeleton with the neat gray beard and the four gold bands on the sleeves, away from the chart table. He looked down at the chart, at the penciled courseline, at the circled intersections of cross bearings. "Yes," he whispered. "As I thought. The South African coast..."

"And where is that, sir?" asked Calhoun.

"On Earth. And the time? Towards the beginning of the Twentieth Century . . ."

By his side Sonya Verrill was looking at the open pages of the Log Book. She said, "The watchkeeper recorded

thunder and exceptionally vivid lightning, and also makes mention of an unusual display of phosphorescence."

"But who were they?" Todhunter was demanding. "How did they get here?"

"I can answer the first question," Grimes replied gravely. His gloved forefinger indicated the heading of the log book path. "'Waratah, from Durban towards Liverpool.' But she never got there."

XV

THERE WERE several big, glazed frames on the after bulk-head of the chartroom, and in one of them was a detailed plan of the ship. Grimes and his officers studied it with interest. McHenry said suddenly, "I'd like to see what their engines are like."

"I can tell you now, Commander," Grimes told him. "Steam. Reciprocating. Coal burning. As I remember the story, she put into Durban for bunkers on her way home from Australia."

"But I'd like to see them, sir." The engineer's forefinger was tracing out a route on the plan. "As long as we keep amidships and carry on down we're bound to come to the stokehole, and from there to the engineroom."

"Then carry on," said Grimes. "But I don't want you to go by yourself."

"I shall be with him," said Calhoun, and Jones said that he wanted to make a further exploration of the derelict, and Todhunter wanted to take more photographs.

Grimes and Sonya went out to the wing of the bridge, keeping a firm grasp on the teakwood rail, and watched the two engineers, the Second Mate and the Surgeon making their way along the boat deck, saw them open a door in the

fiddley casing below and just forward of the funnel and vanish, one by one, into the black opening.

He heard the girl ask, "But how do you explain all this, John?"

"I can't, Sonya—although this could be the explanation of a number of mysteries. As you know, I'm something of an authority on the history of shipping. You'd think that even as far back as the Twentieth Century it would be impossible to lose, completely, anything so large as a ship. After all, in those days there was quite efficient diving gear, and sonic sounding apparatus—and, even though it was in its earliest infancy, there was radio.

"But ships did vanish-and vanish without trace.

"Take this Waratah, for example. She was a new ship, owned by the Blue Anchor Line, built for the cargo-passenger trade between England and Australia. On her maiden voyage she carried freight and passengers outwards, and then loaded more freight—frozen meat and general cargo—in Australia for England, also embarking passengers. She was scheduled to call at Durban on the homeward passage to replenish her coal bunkers, also to disembark and to embark passengers. One odd feature of the voyage was the number of intending travelers who experienced premonitory dreams of a warning character and, as a result of these, canceled their passages.

"Anyhow, she arrived in Durban, and bunkered, and sailed. She exchanged visual signals with another ship shortly afterwards. And that was all.

"Oh, plenty of surface ships did founder, some of them with all hands, and the loss of Waratah was explained away by the theory that she was extremely unstable, and rolled so badly in a heavy swell that she capsized and went down suddenly. But this was not in the loneliness of mid-ocean. This was in soundings, in relatively shallow water, and on a well-frequented shipping route. But no bodies were ever

found, and not a single fragment of identifiable wreckage. . . ." He pointed to a lifebuoy in its rack, the white and scarlet paint still bright, gleaming in the beams from Faraway Quest's searchlights, the black lettering, Waratah, Liverpool, clearly legible. "Even if she had gone down suddenly something would have broken free and floated, something with the ship's name on it. . . .

"She was a passenger liner, and so she became better known than a smaller ship would have done, and her name joined that of Mary Celeste on the long list of unsolved ocean mysteries that, even to this day, are occasionally rehashed by journalists as fillers for Sunday supplements. As a matter of fact that wench from the Lorn Argus who was writing up my library said that she was going to do a series called Maritime Mysteries of Old Earth and spent quite a few evenings browsing among my books. . . .

"But there was Waratah, and there was Anglo-Australian, and there was Cyclops. . . And there were the ships like Mary Celeste, found drifting in perfect order without a soul on board. . . .

"Well, I suppose we've found out what happened. But how? How?"

Sonya said, "That analogy of playing on the black keys, and playing on the white keys, and playing in the cracks, was a good one. But as an Intelligence Officer I've had to do quite a deal of research into this sort of thing. Ocean going ships have vanished, but so have aircraft, and so have spacecraft. And there have been many, many cases of the inexplicable disappearances of people—the crew of your Mary Celeste, for example, and the famous man who walked round the horses, and Ambrose Bierce, and . . . and . . ."

"And?"

"I suppose you're wondering why I haven't cited any modern cases. The trouble, of course, is that Space Travel has given the explainers-away far too easy a time. A ship

goes missing on a voyage, say, from Port Forlorn to Nova Caledon, as the Commission's Delta Eridani did a couple of years back. But Space is so vast, and when you throw in the extra dimensions added by the use of any sort of Interstellar Drive, it's vaster still. When a ship is overdue, you know as well as I do that any search would be quite useless. And men and women still go missing—but if they go missing on any of the frontier planets there are so many possible causes—usually some hitherto undiscovered life form that's gobbled them up, bones, boots and all."

"Even so, records are kept."

"Of course. It takes a small city to house all the Intelligence Department's files on the subject."

They went back into the chartroom. Grimes looked at the dessicated bodies of the Captain and his watch officer, wished that the two men were able to speak, to tell him just what had happened. Perhaps, he thought, they would be able to do so. Results, of a sort, had been achieved by that first séance aboard Faraway Quest. He wondered, too, if Todhunter would be able to revive any of Waratah's people, but he doubted it. In the early days of intersteller expansion a deep freeze technique had been used, but all of those making a long, long voyage in a state of suspended animation had undergone months of preparation before what had been, in effect, their temporary deaths—and in many cases, in far too many cases, the deaths had been all too permanent. It was easy enough to say the words, "Snap-freezing and dehydration," but the actual technique had never been easy.

Carefully Grimes examined the Log Book. The pages were brittle, all moisture leeched from them by their centuries of exposure to hard vacuum. He deciphered the crabbed handwriting in the *Remarks* column. "Mod. beam sea, v. heavy beam swell. Vsl. rolling heavily. O'cast, with occ'l heavy rain and violent thunderstorms. Abnormally bright phosphoresence observed."

Thunder and lightning and abnormally bright phosphorensence . . .

So what?

He muttered, "The electrical storm may have had something to do with it. . . . And possibly there was some sort of disturbance of the Earth's magnetic field in that locality, and something just right—or just wrong—about the period of the roll of a steel hull . . ."

"Or possibly," she said, "there was somebody aboard the ship who was a sort of catalyst. Remember all the dreams, all the premonitory, warning visions, that were experienced just before her disappearance? Perhaps there are people—in fact, our researches hint that there are, and always have been such people—who can slip from one Time Track to another, in many cases quite inadvertently. As well as the records of inexplicable disappearances there are also the records of equally inexplicable appearances—men and women who have turned up from, literally, nowhere, and who have been strangers, lost and bewildered, in a strange world.

"In our own case, how much was due to Mr. Renfrew's fancy apparatus and your own tinkering with anti-matter and anti-gravity, and how much was due to the mediumistic powers of your Miss Karen Schmidt?"

"Could be . . ." he admitted. "Could be . . . It's a farfetched theory, but . . ."

"Farfetched?" she scoffed. "Here we are, marooned in this absolute nothingness, and you have the nerve to accuse me of drawing a long bow!"

"Not quite nothingness," he corrected her. "The indications are that we may be in a sort of graveyard of lost ships. . . . "

"And lost people. The unfortunates who, somehow, have missed their footing from stepping to one track to the next... As Waratah's people did."

"And as we did."

"But we're lucky enough to have a self-sustaining economy."

Grimes broke off the conversation to keep Swinton, back in the control room of Faraway Quest, up to date with what was happening and what had been discovered, including in his report the tentative theories that had been, so far, advanced. The First Lieutenant acknowledged, then said, "I don't want to hurry you, sir. But Mr. Mayhew informs me that he's receiving very faint signals from somewhere. It could either be something or somebody extremely distant, or something quite close but transmitting feebly."

"So we aren't alone in the junkyard," said Grimes. Then, switching frequencies, he succeeded in raising the Second Mate, the doctor and the two engineers, who were still prowling in the bowels of the ship and who were most reluctant to break off their explorations. He ordered them to report to the bridge at once.

At last they appeared, babbling of pistons and furnaces and boilers and refrigerating machinery, carrying lumps of coal that they had taken from the bunkers. Odd souvenirs, thought Grimes—and decided that if he were able he would acquire something more useful, the books from the library, for example, or the grand piano from the First Class Lounge. . . . And with the thought he looked at the long dead Captain and whispered, "It's not theft. I know you wouldn't object to making a gift to a fellow shipmaster."

"What was that, sir?" asked Iones.

"Nothing," snapped Grimes. "Now let's get back to our own wagon and find out what fresh surprises they've cooked up for us."

XVI

ONCE BACK aboard his own ship, Grimes went straight from the airlock to the control room, pausing only to take off his helment. Swinton greeted him with the words, "Mayhew is still picking it up, sir."

"Good. Can he get any kind of directional fix on it?"

"He says not. But you know what Mayhew is like, impossibly vague unless you can nail him down."

Grimes went to inspect the screens first of the radar, then of the Mass Proximity Indicator. Both instruments had been reset for extreme long range. Both showed nothing.

He went to the nearest telephone, put out his hand to take the handset from the rack, then changed his mind. He said, "I shall be with Mr. Mayhew if you want me, Commander Swinton." He made a beckoning nod to Sonya Verrill, who followed him from the control room.

He knew that it would be a waste of time tapping on the door to the Psionic Radio Officer's cabin, but did so nonetheless. He waited for a decent interval and then slid the panel to one side, letting himself and Sonya into the room. Mayhew had his back to them; he was strapped in his seat, his body hunched as though it were being dragged from an upright position by a heavy gravitational field. He was staring at the transparent cylinder, nested in its wires and pipes, in which, submerged in the bath of nutrient fluid, hung the small, gray-white mass, obscenely naked, that was the living brain of one of the most telepathic of all animals, a dog, that was the amplifier with the aid of which a skilled telepath could span the Galaxy.

They may have made a slight noise as they entered; in any case Mayhew turned slightly in his chair and looked at them with vague, unfocused eyes, muttering, "Oh. It's

you." And then, in a more alert voice, "What can I do for you, sir?"

"Just carry on with what you are doing, Mr. Mayhew. But you can talk, I think, while keeping a listening watch."
"Of course. sir."

"This signal you've picked up, can it be vocalised?"

The telepath pondered, then said, "No, sir. It's emotion rather than words. . . . It's a matter of impressions rather than a definite message. . . ."

"Such as?"

"It's hard to put into words, sir. It's dreamlike. A dim dream within a dream..."

"'And doubtful dreams of dreams . . . ' " quoted Grimes.

"Yes, sir. That's it."

"And who, or what, is making the transmission? Is it human? Or humanoid? Or a representative of one of the other intelligent races?"

"There's more than one, sir. Many more. But they're human."

Sonya Verrill said, "There's a chance, John, that there may be some flicker of life, the faintest spark, still surviving in the brains of those people aboard Waratah. What are their dreams, Mr. Mayhew? Are they of cold, and darkness, and loneliness?"

"No, Miss Verrill. Nothing like that. They're happy dreams, in a dim sort of way. They're dreams of warmth, and light, and comfort, and . . ." he blushed ". . . love . . ."

"But it could still be Waratah's people."

"No. I probed her very thoroughly, very thoroughly. They're all as dead as the frozen mutton on her holds."

"How did you know that?" demanded Grimes sharply. "It was necessary, sir, to maintain telepathic contact with the boarding party. I 'overheard' what you were telling the others about Waratah's last voyage."

"Sorry, Mr. Mayhew,"

"And the only telepathic broadcast from the derelict was made by you and your party, sir. With these other signals I get the impression of distance—and a slow approach."

"But who the hell is approaching whom?" exploded Grimes. Then, "I was talking to myself. But we still don't know at what speed we're traveling, if we are traveling. When we matched velocities with Waratah did we reverse our original motion, or did we merely come to rest, or are we still proceeding the same way as we were when we fell into this bloody crack?"

"I'm not a navigator, sir," said Mayhew stiffly.

"None of us is, until there's something to navigate with. But we're interrupting you."

"Not really, sir. This is no more than one of those pleasant dreams you have sometimes between sleeping and waking. . . ." He stiffened. "There's one coming through a little stronger than the others. . . . I'll try to isolate it. . . . Yes . . .

"There are blue skies, and white, fleecy clouds, and a river with green, grassy banks . . . Yes, and trees . . . And I am sitting by the river, and I can feel the warmth of the sun, and the breeze is bringing a scent that I know is that of new-mown hay . . ." He paused, looked at the others with a wry grin. "And I've never seen hay, let alone smelled it. But this is not my dream, of course. Yes. There's the smell of new-mown hay, and there's the song of birds in the trees, and my pipe is drawing well, and my rod is perfectly balanced in my hands, and I am watching the—the bait, the fly that I tied myself, drifting on the smooth surface of the stream, and I know that sooner or later a trout will rise to take it, but there is no hurry. I'm perfectly happy where I am, doing what I am, and there's no hurry . . .

"But there is. Behind it all, underneath it all, there is a sense of urgency. There's the guilty feeling, the guilty

knowledge that I'm late, that I've overslept, and that something dreadful will happen if I don't wake up. . . ."

"Odd," commented Grimes. "Do you know Earth, May-

hew?"

"No, sir."

"Do you know anything about dry flies?"

"What are they, sir?"

"You were talking about tying one just now. They're a form of bait used by fishermen who do it for sport, not commercially. The really keen anglers tie their own flies—in other words they fabricate from feathers, wire, and the odd Gods of the Galaxy alone know what else, extremely odd—but as long as the trout also think that they look edible, why worry?"

"So," said Sonya, "we have a nostalgic dry fly fisherman from Earth, who's dreaming about his favorite sport, marooned, like ourselves, in this crack in Time-Space. Or Space-Time. But, for all we know, we may be picking up this dream from Earth itself. Dimensions are meaningless here. After all, there's Waratah..."

"She's had a long time to drift," said Grimes. "But go on, Mr. Mayhew."

"He's drifted back into the happy dream," murmured Mayhew. "He's not catching anything, but that doesn't worry him"

"And can you isolate any of the others?" asked the Commodore.

"I'll try, sir. But most of them are about long, timeless days in the air and the warm sunshine . . . There is a man who is swimming, and he turns to look at the girl beside him, and her body is impossibly beautiful, pearl-like in the clear, green water . . . And there is a woman, sitting on velvet-smooth grass while her sun-browned children play around her. . . .

"But they're getting closer, whoever they are. They're

getting closer. The dreams are more distinct, more vivid. . . .

"The air is thin and cold, and the hard-packed snow is crunching under my heavy, spiked boots. It seems that I could reach out now to touch the peak with my ice-axe. . . . It's close, close, sharp and brilliantly white against hard blue sky. . . . There's a white plume streaming from it, like a flag of surrender. . . . It's only snow, of course, wind-driven snow, but it is a white flag. It's never been conquered—but in only a few hours I shall plant my flag, driving the spiked ferrule deep into the ice and rock. . . . They said that it couldn't be done without oxygen and crampon-guns and all the rest of it, but I shall do it. . . ."

"It would be quite a relief," remarked Sonya, half seriously, "if somebody would dream about a nice, quiet game of chess in a stuffy room with the air thick with tobacco smoke and liquor fumes."

Grimes laughed briefly. He said, "I have a hunch that these are all hand-picked dreamers, hearty open air types." The telephone buzzed sharply. He reached out, took the instrument from its rest. "Commodore here . . . Yes . . . Yes . . . Secure all for acceleration and prepare to proceed on an interception orbit."

XVII

OUTSIDE THE viewports there was nothing but blackness, and the old steamship was no more than a spark of light, a dimming ember in the screens of radar and Mass Proximity Indicator. A gleaming bead threaded on to the glowing filament that was the extrapolation of Faraway Quest's orbit was the new target, the ship that had drifted in from somewhere(nowhere?) on a track that would have carried her all of a thousand miles clear of the Quest had she not been picked up by the survey ship's instruments.

Grimes and his officers sat in their chairs, acceleration pressing their bodies into the resilient padding. Swinton, as before, had the con, and handled the ship with an ease that many a more experienced pilot would have envied. At a heavy four gravities Faraway Quest roared in on her interception orbit and then, with split second timing, the rockets were cut and the gyroscopes brought into play, spinning the vessel about her short axis. One last brief burst of power and she, relative momentum killed, was herself drifting, hanging in the emptiness a scant mile clear of the stranger.

The searchlights came on.

Faraway Quest's people stared through the ports at the weird construction, only Grimes evincing no surprise. Her appearance confirmed his hunch. She was an affair of metal spheres and girders—a small one, its surface broken by ports and antennae, a large one, with what looked like conventional enough rocket lifecraft cradled about its equator, then another small one, with a nest of venturis protruding from the pole like a battery of guns. There were no fins, no atmospheric control surfaces.

Swinton broke the silence. "What the hell is that?"

"I suggest, Commander, that you take a course in the history of astronautics. That is a relic of the days of the First Expansion, when Man was pushing out toward the stars, without any sort of reliable intersteller drive to cut down the traveling time from centuries to weeks." He assumed a lecture room manner. "You will observe that the ship was not designed for blasting off from or landing on a planetary surface; she is, in fact, a true spaceship. She was constructed in orbit, and stores and personnel were ferried up to her by small tender rockets—quite possibly those same tenders that are secured about the central sphere.

"The small, leading sphere is, of course, the control room.

The central sphere contains the accommodation—if you can call it such. The after sphere is the engineroom."

Swinton said thoughtfully, "And I suppose that she's manned—no, 'inhabited' would be a better word—by the descendants of her original crew and passengers. And they don't know how to use the radio. Judging by all those antennae she's not hard up for electronic gadgetry! And so they haven't heard our signals, or if they have heard them they've not been able to answer. They probably don't even know that we're around."

Grimes laughed gently. "You haven't quite got it right, Commander. She was on a long, long voyage—far longer than her designers anticipated!—but there was no breeding en route"

"But there's life aboard her, sir. All those queer psionic signals that Mayhew's been picking up . . ."

"Yes. There is life aboard her. Of a sort."

"I'm sorry, sir. I don't quite get you."

Grimes relented. "As I said, she's a relic of the First Expansion. In those days, thanks to the failure of anybody, in spite of ample forewarning, to do anything about it, the Population Explosion had come to pass, and both Earth and the habitable planets and satellites of the Solar System were overcrowded. But it was known that practically every sun had its family of planets capable of supporting our kind of life. So there was a siphoning off of surplus population-mainly of those who could not and would not adapt to life in the densely populated cities. Techniques for the suspension of animation were already in existence and so each of the big ships was able to carry an enormous number of passengers, stacked like the frozen mutton in the holds of that ancient steamship. They also carried a large crew, the idea being that the spacemen would keep watches -relatively short intervals of duty sandwiched between decades of deep freeze-so that they, on arrival at their

destination, would have aged only a year or so. The passengers, of course, would not have aged at all.

"Finally, with the ship in orbit about the planet of her destination, everybody would be revived and ferried down to the surface of their new home."

"I'm not sure that I'd care for that, sir."

"Neither should I. But they had no Interstellar Drive. And they didn't know, Commander, as we now know, how many of those ships were to go missing. Some of them must have fallen into suns or crashed on planetary surfaces. Others are still wandering. . . ."

"The Survey Service," put in Sonya Verrill, "has satisfactorily accounted for all but thirteen of them."

"And this one brings the number down to twelve," remarked the Commodore.

"But how did she wander here?" demanded Sonya.

"We can find out," Swinton told her.

"We can try to find out," she corrected him gravely. Grimes stared through the big binoculars at the archaic interstellar ship, carefully studied the forward sphere, the control compartment. He could make out what looked like a manually operated airlock door on its after surface. It should be easy enough, he thought, to effect an entrance.

"Surely the duty watch will have seen the glare of our lights," Swinton was saving.

"I fear that the watch will have been too long for them," said the Commodore quietly.

As before, the boarding party was composed of Grimes, Sonya Verrill, Jones, Calhoun, McHenry and Dr. Todhunter. This time, thought Grimes, there would be something for the engineers and the Surgeon to do. The big ship could be restored to running order, her thousands of people rescued from a condition that was akin to death. And then?

wondered Grimes. And then? But that bridge could be crossed when it was reached, not before.

He led the way across the emptiness between the two vessels—the sleek, slim Faraway Quest and the clumsy assemblage of spheres and girders. He turned in his flight to watch the others—silver fireflies they were in the beam of the Quest's lights, the exhausts of their reaction pistols feeble sparks in the all-pervading blackness. He turned again, with seconds to spare, and came in to a clumsy landing on the still-burnished surface of the control sphere, magnetized knee and elbow pads clicking into contact with the metal. He got carefully to his feet and watched the others coming in and then, when they had all joined him, moved slowly to one of the big ports and shone the beam of his helmet lantern through the transparency.

He saw what looked like a typical enough control room of that period: acceleration chairs, radar and closed circuit TV screens, instrument consoles. But it was all dead, dead. There were no glowing pilot lights—white and red, green and amber—to present at least the illusion of life and warmth. There was a thick hoar frost that sparkled in the rays from the helmet lanterns; there was ice that gleamed in gelid reflection. The very atmosphere of the compartment had frozen.

He made his way from port to port. It was obvious that the control room was deserted—but the control room occupied only a relatively small volume of the forward globe. The rest of it would be storerooms, and hydroponic tanks, and the living quarters for the duty watch.

He said to Sonya, "We may find somebody in the accommodation. Somebody whom we can revive. And if we don't—there are the thousands of dreamers in the main body of the ship. . . . "

He led the way around the curvature of the metal sphere, found the door that he had observed from Faraway Quest.

He stood back while McHenry and Calhoun went to work on it. They did not have to use any of their tools; after a few turns of the recessed wheel it opened easily enough, but the inner door of the airlock was stubborn. It was only after the little party had so disposed itself in the cramped compartment that maximum leverage could be exerted that it yielded, and then barely enough for the Commodore and his compaions to squeeze through one by one. It was a thick drift of snow, of congealed atmosphere, that had obstructed the inward swinging valve. The snow and the frost were everywhere, and the ice was a cloudy glaze over all projections.

They proceeded cautiously through the short alleyway, and then through a hydroponics chamber in which the ultraviolet and infra-red tubes had been cold for centuries, in which fronds and fruit and foliage still glowed with the colors of life but shattered at the merest touch. Grimes watched the explosion of glittering fragments about his inquisitive, gloved finger, and imagined that he could hear, very faintly, a crystalline tinkling. But there was no sound. The interior of the ship was frighteningly silent. There was not even the vibration of footsteps transmitted through metal plating and suit fabric; the omnipresent snow and ice muffled every contact.

They came to a circular alleyway off which numbered doors opened.

Grimes tried the first one, the one with the numeral 4. It slid aside with only a hint of protest. Beyond it was what had been a sleeping cabin. But it was not now. It was a morgue. It held two bodies. There was a big man, and he held in his right hand a knife, and the frozen film on it still glistened redly. There was a woman who was still beautiful. Todhunter's specialized knowledge was not required to determine the cause of death. There was a clean

stab wound under the woman's left breast, and the man's jugular vein had been neatly slit.

They went into the next cabin. Its occupants, lying together in the wide bunk, could have been asleep—but in the clip on the bulkhead to which it had carefully returned was a drinking bulb. It was empty—but the label, upon which was a skull and crossbones in glaring scarlet, made it obvious what the contents had been.

In the third cabin there was shared death too. There was an ingenious arrangement of wires leading from a lighting fixture to the double bunk, and a step-up transformer. The end might have been sudden, but it had not been painless. The two frozen bodies, entangled in the lethal webbing, made a Laocoön-like group of statuary—but that legendary priest of Apollo had perished with his sons, not with a woman.

And in the fourth cabin there was only one body, a female one. She was sitting primly in the chair to which she was strapped, and she was clothed, attired in a black uniform that was still neat, that did not reveal the round bullet hole over the breast until a close inspection had been made.

"Cabin Number One . . ." said Calhoun slowly. "Could she have been the Captain?"

"No," said Grimes. "This, like the others, is a cabin for two people. And there's no sign of a weapon. . . ." Gently he brushed a coating of frost from the woman's sleeve. "Gold braid on a white velvet backing . . . She will have been the Purser."

They found the Captain in a large compartment that lay inboard from the alleyway. He, too, was formally clothed in gold-buttoned, gold-braided black. He was huddled over a desk. The automatic pistol was still in his hand, the muzzle of the weapon still in his mouth. Frost coated the exit wound at the back of his head, robbing it of its gruesomeness. Before him was a typewriter and beside the

machine was a small stack of paper, held to the surface of the desk by a metal clip.

Grimes read aloud the heading of the first page:

"TO WHOM IT MAY CONCERN ...

"IF AND WHEN . . .

"WHEN AND IF ...

"IF EVER."

It was gallows humor, and it was not very funny.

XVIII

"JUST POSSIBLY (Grimes read) somebody, somewhere, may stumble upon us. When we pushed off from Earth there was talk of an interstellar drive that would enable ships to take short cuts through sub-Space. I suppose that it's sub-Space that we're in now. But I don't know how we got here, and I don't know how we can get out. If I did know I would not have sanctioned the use of the Euthanol-and how was I to know that all but one of the containers had leaked?-and, in the case of the Gallaghers, the Nakamuras and ourselves, the rather messy substitutes. We could have finished our watch, of course, and then awakened Captain Mitchell and his staff so that they could have returned us to the state of suspended animation-but we talked it over and we decided against it. Our dreams, during our long sleep, our long watch below, would not have been happy ones. All the others are dreaming happily of the lives that they will lead on the new world to which we are bound, the lives of which their rationed vacations in Earth's fast dwindling Nature Reserves were brief forecasts. But our dreams, now, would be full of anxiety, of cold and loneliness, of the black emptiness into which we have fallen.

[&]quot;But how?

[&]quot;How?

"It's the odd flotsam that we've sighted, from time to time, that has made up our minds. What laws of motion are valid in this Limbo we do not know. Perhaps there are no laws. But, appearing from nowhere, there was that corpse that orbited for some hours about the control sphere. It was that of a man. He was wearing archaic clothing: a gray top hat, a stock and cravat, a frock coat. Mary Gallagher, whose hobby is—was, I should say—history, said that his dress was that of the early Nineteenth Century. And then there was an aircraft, a flimsy affair of fabric and stays and struts. Centuries ago they must have fallen here—they and the other briefly glimpsed men and women, and a surface ship from the days of steam on Earth's seas, and a clumsy looking rocket (not that we can talk!) bearing on its side characters that bore no resemblance to any Earthly alphabet.

"But I feel that my time is running out. All the others are dead. Sarah asked me to dispose of her, giving as her reason her nervousness with firearms. But the others are dead. The Browns were lucky—when I dealt the cards she got the ace of spades, and with it the only intact bulb of Euthanol. The rest of us could have shared the pistol, but Nakamura preferred something more traditional (although, at the end, he didn't use the knife in a traditional way) and Gallagher was an engineer to the end. But my time is running out. When I have finished this I shall shut down the machinery and then come back here to use the pistol on myself.

"So here is the story—such as it is. If whoever finds it—and I feel that it will be some castaway like ourselves—can read it, it might be of value.

"Fully manned, provisioned and equipped, with a full load of passengers, we broke away from orbit on January 3, 2005. (Full details will be found in the Log Books.) Once we were on the trajectory for Sirius XIV, watches were set.

First Captain Mitchell, as senior officer, did the first year, so that he and his staff could make any necessary minor adjustments. The rest of us, after the period of preparation, went into the Deep Freeze. First Captain Mitchell was succeeded by Second Captain von Spiedel, and he was succeeded by Third Captain Cleary. So it went on. It was a routine voyage, as much as any interstellar voyage is routine.

"We relieved Captain Cleary and his people.

"There was a period of three weeks, as measured by the chronometer, during which we were able to mingle socially with our predecessors, whilst Pamela Brown, in her capacity as Medical Officer, worked with Brian Kent, Cleary's M.O., to restore us to full wakefulness and to prepare the others for their long sleep. And then, after Cleary and his team had been tucked away, we were able to get ourselves organized. The control room watches, of course, were no more than a sinecure. Routine observations were taken and told us that we were exactly on course and that our speed of advance was as predicted. The last observation, made at 1200 hours on the day that it happened, gave our position as 1.43754 Light Years out from Earth, and our velocity as 300 m.p.s. Full details are in the Log Book.

"That night—we divided our time, of course, into twenty-four hour periods—all off-duty personnel were gathered in the wardroom. There was the usual rubber of bridge in progress, and the playmaster was providing light background music. Nakamura and Mary Gallagher were engaged in their habitual game of chess. Brown had the watch and his wife was keeping him company. It was typical, we all thought, of a quiet evening in Deep Space. Those of us who were on duty were keeping the machines running, those of us off duty were relaxing in our various ways.

"So the sudden ringing of the alarm bells was especially shocking.

"I was first in the control room, but only by a very short

head. There was no need for Brown to tell us what was wrong; it was glaringly obvious. No, not glaringly obvious. It was the absence of glare, of light of any kind, that hit us like a blow. Outside the viewports there was only a featureless blackness.

"We thought at first that we had run into a cloud of opaque dust or gas, but we soon realized that this hypothesis was untenable. Until the very moment of black-out, Brown told us, the stars ahead had been shining with their usual brilliance, as had been the stars all around the ship. Furthermore, one cannot proceed through a cloud of dust or gas, however tenuous, at a speed of 300 m.p.s. without an appreciable rise in skin temperature. An appreciable rise? By this time the shell plating would have been incandescent and all of us incinerated.

"I'll not bore you, whoever you are (if there ever is anybody) with a full account of all that we did, of all that we tried, of all the theories that we discussed. Brown stuck to his story. At one microsecond the viewports had framed the blazing hosts of Heaven, at the next there had been nothing there but the unrelieved blackness. We thought that we might be able to learn something from the radio, but it was dead, utterly dead. We disassembled every receiver and transmitter in the control sphere, checked every component, reassembled. And still the radio was dead. There were no longer the faint signals coming in from Earth and from other interstellar ships. There were no longer the signals emanating from those vast broadcasting stations that are the stars

"But there were no stars.

"There are no stars any more.

"And then, over the weeks, there were the—apparitions?" No. Not apparitions. They were real enough. Solid. Brown and Nakamura took one of the tenders out, and ran right alongside an ocean-going ship out of Earth's past.

Her name was Anglo-Australian, and on her funnel was a black swan on a yellow field. They were wearing their spacesuits, so they were able to board her. They found—but could it have been otherwise?—that all of her crew was dead. There were no entries in the Log Book to account for what had happened to her. As in our case, it must have been sudden.

"There was the flotsam—the bodies, some clothed in the fashions of bygone centuries, some not clothed at all. The sea-going ships and the aircraft—and some of them could never have come from Earth. There was the huge affair that consisted of a long fuselage slung under what must have been an elongated balloon—but the balloon had burst—with a crew of insects not unlike giant bees. There was that other construction—a relatively small hull suspended amid a complexity of huge sails. We never found out who or what had manned her; as soon as we turned our searchlights on her she vanished into the distance. A sailing ship of Deep Space she must have been—and we, unwittingly, provided the photon gale that drove her out of our ken.

"And we worked.

"But there was no starting point. We had fallen somehow into sub-Space—as had all those others—but how? How?

"We worked, and then there were weeks of alcoholic, sexual debauch, a reaction from our days of wearisome, meaningless calculation and discussion. And when, sated, we returned to sobriety we were able to face the facts squarely. We were lost, and we did not possess the knowledge to find our way out of this desert of utter nothingness. We considered calling the other watches—and then, in the end, decided against it. They were happy in their sleep, with their dreams—but we, we knew, could never be happy. We knew too much—and too little—and our dreams would be long, long experiences of tortured anxiety. We could see no faintest gleam of hope.

"And so we have taken the only way out.

"But you, whoever you are (if there ever is anybody) will be able to help.

"The other watches are sleeping in their own compartments in the northern hemisphere of the main globe. The waking process is entirely automatic. Give First Captain Mitchell my best wishes and my apologies, and tell him that I hope he understands.

John Carradine, Fourth Captain."

XIX

THEY LEFT the control sphere then, and made their way through an airlock to the tube that connected it with the large globe that was the main body of the ship. They found themselves in a cylindrical space with a domed deck head, in the center of which was the hatch through which they had entered. In the center of the deck there was a similar hatch.

There were doors equally spaced around the inside surface of the cylinder. All of them were labeled, having stenciled upon them names as well as rank. "First Captain Mitchell..." read Sonya Verrill. "Chief Officer Alvarez... Second Officer Mainbridge... Third Officer Hannahan... Bio-Technician Mitchell..." She paused, then said, "I suppose that a husband-wife set-up is the best way of manning a ship like this..."

Grimes slid the door aside.

The helmet lanterns threw their beams onto eight tanksa tier of four, and another tier of four. They looked, thought the Commodore, like glass coffins, and the people inside them like corpses. (But corpses don't dream.)

Four of the tanks held men, four held women. All of

them were naked. All of them seemed to be in first-class physical condition. Mitchell—his name was on a metal tag screwed to the frame of his tank—was a rugged man, not young but heavily muscled, robust. He did not need a uniform as a professional identification. Even in repose, even in the repose that was almost death, he looked like a master of men and machines, a man of action with the training and intelligence to handle efficiently both great masses of complex apparatus and the mere humans that operated it.

Grimes looked at him, ignoring the other sleepers. He wondered if Mitchell were the fisherman whose pleasant dreams were being spoiled by the sense of anxiety, of urgency. It could be so. It probably was so. Mitchell had been overdue to be called for his watch for a matter of centuries, and his was the overall responsibility for the huge ship and her cargo of human lives.

Todhunter was speaking. There was a certain disappointment in his voice. "I don't have to do anything. I've been reading the instructions, such as they are. Everything is fully automated."

"All right, Doctor. You can press the button. I only want First Captain Mitchell awakened." He added softly, "After all, this is his ship. . . ."

"I've pressed the button," grumbled Todhunter. "And nothing has happened."

McHenry laughed. "Of course not. The dead Captain in the control sphere, in the wardroom, said that he'd shut down all the machinery."

"As I recall it," said Grimes, "these things were powered by a small reactor. It will be right aft, in the machinery sphere. Carradine was able to shut down by remote control, but we won't be able to restart the same way. The batteries must be dead."

"As long as the Pile is not," contributed McHenry.

"If it is, we shall send for power packs from the Quest. But I hope it's not."

So they left Mitchell and his staff in their deep, frozen sleep and made their way aft, through deck after deck of the glass coffins, the tanks of the motionless dreamers. Jones paused to look at a beautiful girl who seemed to be suspended in a web of her own golden hair, and murmured something about the Sleeping Beauty. Before Grimes could issue a mild reprimand to the officer, McHenry pushed him from behind, growling, "Get a move on! You're no Prince Charming!"

And Grimes, hearing the words, asked himself, Have we the right to play at being Prince Charming? But the decision is not ours to make. It must rest with Mitchell . . .

Then there was the airlocked tube leading to the machinery sphere, and there were the pumps and the generators that, said McHenry, must have come out of Noah's Ark. "But this is an Ark," said Jones. "That last deck was the storage for the deep-frozen, fertilized ova of all sorts of domestic animals..."

There were the pumps, and the generators and then, in its own heavily shielded compartment, the Reactor Pile. McHenry consulted the counter he had brought with him. He grunted, "She'll do."

Unarmored, the people from Faraway Quest could not have survived in the Pile Room—or would not have survived for long after leaving it. But their spacesuits gave protection against radiation as well as against heat and cold and vacuum, and working with bad-tempered efficiency (some of the dampers resisted withdrawal and were subjected to the engineer's picturesque cursing) McHenry got the Pile functioning.

Suddenly the compartment was filled with an opaque mist, a fog that slowly cleared. With the return of heat the frozen air had thawed, had vaporized, although the car-

bon dioxide and water were still reluctant to abandon their solid state.

McHenry gave the orders—he was the Reaction Drive specialist, and as such was in charge, aboard his own ship, of all auxiliary machinery. McHenry gave the orders and Calhoun, assisted by the second Mate, carried them out. There were gauges and meters to watch and, finally, valves to open. Cooling fluid flashed into steam, and was bled carefully, carefully into piping that had been far too cold for far too long a time. And then hesitantly, complainingly, the first turbine was starting to turn, slowly, then faster and faster, and the throbbing whine of it was audible through their helmet diaphragms. Leaping from position to position like an armorèd monkey, McHenry tended his valves and then pounced on the switchboard.

Flickering at first, then shining with a steady brilliance, the lights came on.

They hurried back through the dormitory sphere to the compartment in which First Captain Mitchell and his staff were sleeping. There Todhunter took charge. He slid shut the door though which they had entered and then pulled another door into place, a heavier one with a thick gasket and dogs all around its frame. He borrowed a hammer from McHenry to drive these into place.

Grimes watched with interest. Obviously the Surgeon knew what he was doing, had studied at some time the history of the "deep freeze" colonization ships, probably one written from a medical viewpoint. He remarked, "I can see the necessity for isolating this compartment, but what was that button you pressed when we first came in here? I thought that it was supposed to initiate the awakening process."

Todhunter laughed. "That was just the light switch, sir. But once we've got over these few preliminaries everything will be automatic. But, to begin with, I have to isolate

the other bodies. Each tank, as you see, is equipped with its own refrigeration unit, although this transparent material is a highly efficient insulation. Even so, it will be as well to follow the instructions to the letter." He paused to consult the big, framed notice on the bulkhead, then went to a control console and pressed seven of a set of eight buttons. On seven of the eight coffins a green light glowed. "Now . . . heat." Another button was pressed, and the frost and ice in the wedge-shaped compartment began to boil.

When the fog had cleared, the Surgeon muttered, "So far, so good." He studied the tank in which lay the body of First Captain Mitchell, put out a tentative hand to touch lightly the complexity of wiring and fine piping that ran from its sides and base. He said, "You will have noticed, of course, that the arrangements here are far more elaborate than those in the main dormitory decks. When the passengers are awakened, they will be awakened en masse. . ."

"Get on with it, Doctor!" snapped Sonya Verrill.

"These things cannot be hurried, Commander. There is a thermostatic control, and until the correct temperature is reached the revivification process cannot proceed." He gestured towards a bulkhead thermometer. "But it should not be long now."

Suddenly there was the whine of some concealed machinery starting, and the stout body of the First Captain was hidden from view as the interior of his tank filled with an opaque, swirling gas, almost a liquid, that quite suddenly dissipated. It was replaced by a clear amber fluid that completely covered the body, that slowly lost its transparency as the pneumatic padding upon which Mitchell lay expanded and contracted rhythmically, imparting a gentle agitation to the frame of the big man. The massage continued while the fluid was flushed away and renewed, this process repeated several times.

At last it was over.

The lid of the coffin lifted and the man in the tank stretched slowly and luxuriously, yawned hugely.

He murmured in a pleasant baritone, "You know, I've been having the oddest dreams . . . I thought that I hadn't been called, and that I'd overslept a couple or three centuries. . . " His eyes opened, and he stared at the space-suited figures in the compartment. "Who are you?"

XX

GRIMES PUT up his hands to his helmet, loosened the fastenings and gave it the necessary half turn, lifted it from the shoulders of his suit. The air of the compartment was chilly still, and damp, and a sweet yet pungent odor made him sneeze.

"Gesundheit," muttered the big man in the coffin.

"Thank you, Captain. To begin with, we must apologize for having boarded your ship uninvited. I trust that you do not object to my breathing your atmosphere, but I dislike talking through a diaphragm when I don't have to."

"Never mind all that." Mitchell, sitting bolt upright in his tank, looked dangerously hostile. "Never mind all that. Who the hell are you?"

"My name is Grimes. Commodore. Rim Worlds Naval Reserve. These others, with the exception of the lady, are my officers. The lady is Commander Verrill of the Federation Survey Service."

"Rim Worlds? Federation?" He looked wildly at the other tanks, the transparent containers in which his own staff were still sleeping. "Tell me it's a dream, somebody. A bad dream."

"I'm sorry, Captain. It's not a dream. Your ship has been drifting for centuries," Sonya Verrill told him.

Mitchell laughed. It was a sane enough laugh, but bitter. "And while she's been drifting, the eggheads have come

up with a practicable FTL drive. I suppose that we've fetched up at the very rim of the Galaxy." He shrugged. "Well, at least we've finally got some place. I'll wake my officers, and then we'll start revivifying the passengers." His face clouded. "But what happened to the duty watch? Was it von Spiedel? Or Cleary? Or Carradine?"

"It was Carradine." Grimes paused, then went on softly, "He and all his people are dead. But he asked to be remembered to you."

"Are you mad, Commodore whatever your name is? How did you know that it was Carradine? And how can a man who's been dead for centuries ask to be remembered to anybody?"

"He could write, Captain. He wrote before he died-an account of what happened. . . ."

"What did happen, damn you? And how did he die?"
"He shot himself," Grimes said gravely.

"But what happened?"

"He didn't know. I was hoping that you might be able to help us."

"To help you? I don't get the drift of this, Commodore. First of all you tell me that you've come to rescue us, and now you're asking for help."

"I'm deeply sorry if I conveyed the impression that we were here to rescue you. At the moment we're not in a position to rescue anybody. We're castaways like yourselves."

"What a lovely, bloody mess to be woken up to!" swore Mitchell. He pushed himself out of the tank, floated to a tall locker. Flinging open the door he took out clothing, a black, gold-braided uniform, a light spacesuit. He dressed with seeming unhurriedness, but in a matter of seconds was attired save for his helmet. He snapped to McHenry, who was hung about with his usual assortment of tools, "You with all the ironmongery, get ready to undog the door, will you?" And to Grimes and Sonya Verrill, "Get your hel-

mets back on. I'm going out. I have to see for myself . . ." And then he moved to the tank beside the one that he had vacated, looked down at the still body of the mature but lovely woman. He murmured, "I'd like you with me, my dear, but you'd better sleep on. I'll not awaken you to this nightmare."

Mitchell read the brief account left by Carradine, then went to the next level, the control room, to inspect the Log Book. He stared out through a port at Faraway Quest, and Grimes, using his suit radio, ordered Swinton to switch off the searchlights and turn on the floods. He stared at the sleek, graceful Quest, so very different from his own ungainly command, and at last turned away to look through the other ports at the unrelieved emptiness. His suit had a radio of sorts, but it was A.M. and not F.M. He tried to talk with Grimes by touching helmets, but this expedient was far from satisfactory. Finally the Commodore told McHenry to seal off the control room and to turn on the heaters. When the frozen atmosphere had thawed and evaporated it was possible for them all to remove the headpieces of their suits.

"Sir, I must apologize for my lack of courtesy," said the First Captain stiffly.

"It was understandable, Captain Mitchell," Grimes told him.

"But Captain Carradine should have called me," Mitchell went on.

"And if he had, Captain, what could you have done? In all probability you would have died as he died. As it is, you know now that you stand a chance."

"Perhaps, sir. Perhaps. But you haven't told me Commodore, how you come to be marooned in this Limbo."

"It's a long story," said Grimes doubtfully,

"And we've all the time in the Universe to tell it, John,"

put in Sonya Verrill. "Or all the time out of the Universe. What does it matter?"

"All right," said Grimes. "It's a long story, but you have to hear it, and it could well be that you might be able to make some suggestion, that there is some important point that has escaped us but that you, with a mind fresh to the problem, will seize upon."

"That's hardly likely," The First Captain said. "When I look at your ship out there, and envisage all the centuries of research that have gone into her building . . . But go ahead, sir. At least I shall be privileged with a glimpse into the future—although it's not the future now."

Grimes told the story, trying to keep it as short as possible, but obliged, now and again, to go into technical details. He told the story, asking his officers to supply their own amplifications when necessary. Mitchell listened attentively, asking an occasional question.

"So," he said when at last the Commodore was finished, "we are not the only ones to have fallen into this hole in Space-Time. There was the old surface ship that you boarded; there was the suface ship that Carradine's people boarded. There were the aircraft that Captain Carradine mentioned . . . That dirigible airship, sir, with the crew of beelike beings. . .?"

"The Shaara, Captain. They, too, have interstellar travel."

"There's some sort of a connection, Commodore. You got here, you think, by the use of your fantastic electronic gadgetry. But we didn't. And those old surface ships and aircraft didn't... And those people, sighted by Carradine, with no ships at all... These Shaara, Commodore, what are they like?"

"To all intents and purposes, Captain, they're highly evolved honey bees."

"H'm. But they have something that we have, otherwise

they'd never have gotten here. Intelligence, of course. Technology. The airship that Carradine saw, and the spaceships that you say they have now . . . But there must be something else"

"There is," stated Calhoun flatly.

"And what is that, Commander?" asked Grimes.

"It's a matter of . . . Well, I suppose you'd call it Psionics, sir."

"But the Shaara are an utterly materialistic race."

"I agree, sir. But they still possess certain abilities, certain talents that were essential to their survival before they started to climb the evolutionary ladder. Such as dowsing . . ."

"Dowsing, Commander Calhoun?"

"Yes. According to some authorities, the ability of the honey bee on Earth, and on the other worlds to which it has been introduced, to find nectar-laden blossoms is akin to dowsing, for water or minerals, as practised by human beings."

"H'm. This is the first time that I've heard that theory."
"It's not a new one, sir."

Mitchell smiled for the first time since he had been awakened. It was not a happy smile, but it brought a momentary easing of the stern lines of his face. "Dowsing . . ." he whispered. "Yes. There could be a connection . . ."

"Such as?" asked Sonya Verrill.

The First Captain replied in a voice that was again doubtful, "I don't know. But . . ." He went on, "As you must know, this ship is one of the specialized vessels built for large scale colonization. I've no doubt that in your day, Commander Verrill, newly discovered worlds are thoroughly surveyed before the first shipment of colonists was made. But in my time this was not so. The big ships pushed out into the unknown, heading for sectors of Space recommended by the astronomers. If their first planetfall was disappointing, then they proceeded to an alternative objective. And so on.

But the crews and the passengers of the ships were themselves the survey teams.

"I need hardly tell you what such a survey team would have to look for. Water, on worlds that were apparently completely arid. Necessary ores. Mineral oil. The necessary electronic divining apparatus could have been carried, but in many ways it was better to carry, instead, a certain number of men and women who, in addition to their other qualifications, possessed dowsing ability."

"I think I see what you're driving at, Captain," objected Sonya Verrill. "But those surface ships and aircraft would not have carried dowsers as an essential part of their crews."

"Perhaps not, Commander Verrill. But-"

Calhoun broke in. "Dowsing ability is far more widespread than is generally realized. Most people have it to some degree."

"So the Shaara can dowse, and we can dowse," said Grimes. "But what is the connection?"

"You know where the dowsers among your passengers are berthed, Captain?" asked Calhoun. "Or should I have said 'stowed'?"

"Stowed is the better word," Mitchell admitted. "I don't know at the moment where they are, but as soon as I've consulted the passenger list and the plans . . ."

"I'm sure that they've something to do with it," Calhoun stated firmly. Then, to the Commodore, "I suggest that you tell Commander Swinton to get Mr. Mayhew into a suit, and send him across here. As soon as possible."

"Who is Mr. Mayhew?" asked Mitchell.

"Our Psionic Radio Officer. A trained telepath."

"So that idea was developed after all. There was talk of it in my time. So you think he may be able to read the minds of my dowsers?"

"I hope so," said Grimes. Then, "I'll get Swinton to send one of our suits across for you. It will make things easier

if we're able to speak with each other when we're suited up again." He put his helmet back on, called his First Lieutenant aboard the *Faraway Quest* and gave him the orders.

XXI

THEY DID NOT have long to wait for Mayhew.

They watched him, accompanied by one of the junior engineers, jetting across the emptiness between the two ships. Jones squeezed through the sphincter airlock that sealed the hatch in the control room deck, and went down to the airlock proper in the after-hemisphere of the globe. He must have flashed his helmet lantern as a signal, as the two spacesuited figures veered abruptly in midflight and, shortly thereafter, were lost to view from the control room ports. Grimes, still wearing his helmet, heard Jones say, "Mr. Mayhew and Mr. Trent are aboard, sir."

"Good. Bring them up here, will you?"

The diaphragm in the deck bulged and developed a hole in its center, through which appeared the head of the Second Officer, and then his shoulders and finally, after a deal of squirming on his part, the rest of his body. The transparency of his helmet and the fabric of his suit were immediately bedewed with condensation. He stood there to help Mayhew through the Sphincter and, when he was in the control room, the junior engineer. They had been exposed to the cold for a longer period, and the congealing atmospheric moisture clothed them in glittering frost.

The three men put up their gloved hands to remove their helmets.

"You wanted me, sir?" asked Mayhew vaguely.

"Of course," Grimes bit back a sarcastic retort.

The telepath ignored him, turned his attention to First Captain Mitchell. "You're the fisherman. You were the one

who was dreaming of sitting by a sunlit stream with rod and line-"

"Never mind that now," snapped the Commodore. "Just listen to what we want, please."

"I already know, sir."

"H'm. Yes. I suppose you do. But isn't it rather against the Institute's Code of Ethics to eavesdrop?"

"Not in these circumstances, sir. My duty was to receive and to record every impression emanating from the minds of the boarding party."

"Well, it saves time. As you know, First Captain Mitchell, as soon as he's got himself into the spare suit you brought, is going to take us into the dormitory sphere, to where the team of dowsers is stowed. There may be some connection between them and the transference of ships and people to this . . . What did you call it, Captain? To this sub-Space."

Mitchell, out of his own spacesuit but not yet into the one from Faraway Quest, was standing by an open filing cabinet, had pulled from it a bulky folder. "C Level," he was muttering, "Sector 8. Tanks 18 to 23 inclusive . . ." He put the folder back into the cabinet and then was helped into the suit by Sonya Verrill.

With the Captain to guide them, it did not take them long to find the tanks in which the dowsers slept. There were six of them—two very ordinary looking men and four women, one of whom looked far from ordinary. The telepath stood by the first of the transparent containers, staring at the man inside it, his face behind the helmet view-plate wearing an expression of deep concentration.

"This man," he said at last, "is dreaming of food. . . . I can see a table, a table covered with a snow-white cloth, and an array of crystal goblets, and gleaming silverware. There are other people around the table, but they are blurred, indistinct. They are not important. But the waiter

holding up the bottle of wine for my inspection is . . . He is an elderly, portly man, with a ruddy face and gray, mutton-chop whiskers. He smiles as he pours a few drops from the bottle into my glass. I sip it, It is a white wine, very dry. I nod my approval.

"Another waiter is bringing in the first course: the oysters, the brown bread and butter, the lemon wedges . . ."

"Not much for us there," interrupted Grimes.

"Oh, all right. All right. But I was just beginning to enjoy it. It was the first time that I'd seen oysters-me, I mean, not the man who's having the dream-and I wanted to know what they taste like. But it's too late now. Time is accelerated in dreams, and he's polished them off. . . ." He glowered moodily at the tank below the first one. "This man works in his dreams. He's striding up a hillside, over short, springy turf. He is holding a forked twig in his hands. I can feel the odd, soft roughness of it, the-the aliveness of it. There's a tension, a feeling of pleasurable anticipation, and it comes from the twig itself, and from the ground over which I am walking, and from me. . . . And I can feel the twig twitching, and I know that it's water under my feet, running water. . . . But I carry on. There's no urgency. I can feel all the mineral wealth beneath me, around me-the metals, the radio-actives . . ."

"No," said Grimes. "That's not it."

"I wish you'd let me finish a dream, sir, even though it's not my own."

Mayhew moved to the next tank.

In this one there was a woman, a tall, angular woman with a narrow face, sharp features. There was a drabness about her—a drabness, Grimes somehow knew, that would still have been there had she been awake and clothed, a coldness that was more intense than the frigidity of her physical environment.

The telepath stared at her, his face frightened. His lips

moved, but no sound came. He muttered at last, "She's dead. She's dead, but . . ."

"But what?" demanded the Commodore sharply.

"There's . . . How shall I put it? There's a-a record . . ."
"A ghost," said Calhoun.

"No. Not a ghost. There's the record of her last thoughts still in her brain. . . . But I can't play it back. There's the sense—no, not even the sense, just a hint—of some orgasmic experience, something that was too intense, something that was too much for her mind. . . ."

Todhunter said, "But there was no physical cause of death. In her condition there couldn't have been. Perhaps we could still revivify her . . ." He turned to Mitchell. "As I understand it, Captain, it would be impossible to deal with people on these dormitory decks individually. If we revive one, we revive them all."

"Yes," agreed the First Captain. "That is so."

"Then would you have any objection if we used the

empty tank in your sleeping quarters for this woman?"

"Yes," replied Mitchell. "I most certainly should." His manner softened. "But there are eight empty tanks in Carradine's compartment, and neither he nor his officers are in any state to object."

"Good."

"Check the other dowsers first, Mr. Mayhew," said Grimes. Mayhew did so. The three remaining women were all alive—if their state of suspended animation could be referred to as life—and all peacefully dreaming. The pictures in their minds were pleasant, humdrum pictures of husbands and homes and children.

The tank was opened, and the rectangular block of solidfrozen gas in which was the woman's body lifted out quite easily. Even so, it was an awkward burden, even under conditions of free fall. Todhunter and Jones maneuvered it

through the tiers of containers to the cylinder that was the axis of the globe, and then it had to carried from level to level until the final deck was reached, the deck on which were the crew dormitories.

The doctor left Jones in charge of the body, went with Mitchell and Grimes and Sonya Verrill into what had been the Fourth Captain's compartment. All the tanks, of course, were empty. Mitchell satisfied himself that Carradine's container was ready for occupancy, and the ice-encased corpse was brought in, lowered into the rectangular box. Then, when all members of the party were in the wedge-shaped room, the double door was dogged tight and the automatic revivification process initiated.

There was the gradual rise of temperature and the thawing and evaporation of the frozen gases, and there was the thawing of the frozen gas in the coffin. There was the influx and the drainage of the colored fluids, the rhythmic massaging action of the pneumatic padding. Slowly the skin of the woman changed from silvery gray to a yellowish pallor, and then was suffused with the faintest of pink flushes. The eyelids flickered, and one leg began to twitch.

"She's not dead," murmured Grimes.

"But she is," contradicted Mayhew. "And there's just a spark... Just a spark, no more. And I don't like it."

The lid of the casket lifted, and as it did so the woman slowly assumed a sitting posture. Her eyes opened and she stared mindlessly. Her jaw hung slackly and saliva dribbled from her mouth. She was making a coarse, disgusting grunting noise.

"The blue sky . . ." Mayhew whispered. "The clear sky, and the aching blue of it . . . And it's rending, like a piece of cloth between two giant hands. . . . It's rending, and the noise of its tearing is louder than the loudest thunder. . . . And beyond it is the blackness, the dense blackness,

and it's empty.... But it's not empty. They are there, company after company of them, robed in shining white and with great white wings that span the heavens... And they raise their golden trumpets to their lips, and the sound is high and sweet, high and impossibly sweet, long, golden notes rolling down through that rent in the sky, and the voices, the golden voices and the silver voices, and the flaming swords lifted high to smite the unrighteous, and ... And ...

"And that was all," he concluded. "She's gone now, finally gone. What's in the box is no more than a mindless hunk of flesh. But she's gone . . ."

"So that was what she dreamed?" asked Mitchell in an almost inaudible voice. "So that was what she dreamed, and with such intensity as almost to drag the ship with her through that rent in the blue sky. . . . But was it her? Could it possibly have been her?"

"Have you any better explanation?" countered the telepath.

"Is it an explanation?" asked Grimes tiredly.

XXII

Ir wasn't much of an explanation, but it was the only one that they had had. What Faraway Quest's people had achieved by a sophisticated juggling with the laws of physics (but the juggling had not been sufficiently sophisticated, or the laws not properly formulated) these others had achieved, inadvertently, by the function or malfunction of parapsychological principles. Throughout human history—and the history of other intelligent beings in the Galaxy—dowsers had sought, and they had found. And some of these diviners, in dream states, had sought for things and places beyond the bounds of Space and Time. Perhaps some of them had attained their dream countries, but the majority

must have fallen into this Limbo, this gulf between the Universes, dragging, in so many cases, their hapless shipmates with them.

"Commodore," whispered Mitchell, "that's how it must have been. Our ship isn't like yours. She's just an ion drive rocket, archaic by your standards. We've no fancy dimension-twisting gadgetry."

"That's how it could have been," admitted Grimes guardedly, but already he was considering ways and means, already he was trying to work out methods whereby both ships, his own as well as First Captain Mitchell's, could be saved. He was trying to recall all that he had read of the First Expansion, the Interstellar Arks. As in the Ark of Biblical legend the passengers had boarded two by two, an even distribution of the sexes being maintained. So . . . he thought. So . . . there's just a chance that I may be able to salvage this hunk of ancient ironmongery and, at the same time, exact a fee for the operation. . . . He saw that Sonya was looking at him, realized that already there was a strong bond between them, more than a hint of the telepathy that springs into being between people in love. She was looking at him, and an expression that could have been maternal pride flickered briefly over her face.

"Out with it, John," she murmured.

He smiled at her and then turned to the Psionic Radio Officer. "Mr. Mayhew, can you enter minds?"

"How do you mean, sir?" countered the telepath cautiously.

"To influence them."

"It's against the rules of the Institute, sir."

"Damn the Institute. Its rules may hold good throughout the Galaxy, but we're not in the Galaxy. As far as our own ship is concerned, I am the law, just as Captain Mitchell is the Law in this vessel. Can you enter another person's mind to influence it?"

"Sometimes, sir."

"The mind of one of the sleepers aboard this ship. One of the dreamers."

"That would be easy, sir."

"Good. Now, Captain Mitchell, this is what I have in mind. You have five diviners, five dowsers, still dreaming happily in their tanks. Mr. Mayhew is going to-to tamper with the dreams of four of them. Mr. Mayhew is a very patriotic Rim Worlder and thinks that Lorn is the next best place to Eden, and he's going to use his talents to sell Lorn in a big way to the dreaming dowsers. My idea is this. Each of them will dream that he is lost in a dark emptiness-as, in fact, we all are. Each of them will dream that he has his rod in his hand-his hazel twig, or his length of wire or whatever it is that he favors. Each of them will dream that the wand is leading him, pulling him towards a pearly globe set in the black sky. He'll know the name of it, and Mayhew will be able to supply details of the outlines of seas and continents. The sky isn't always overcast, and all of us have seen Lorn a few times from Outside with all details visible.

"I'm not saying that this will work, Captain, but it just might. If it doesn't work we shall none of us be any worse off. And if it does work—well, you'd better get your rockets warmed up before Mr. Mayhew goes to work, so you'll be able to throw yourself into a safe orbit."

"It sounds crazy, Commodore," Mitchell said. "It sounds crazy, but no crazier than all of us being here. I shall have to call my officers first so that all stations are manned."

"Of course. Dr. Todhunter will lend you a hand."

Mitchell's expression was still dubious. "Tell me, sir, why did you make it quite plain that four of the dowsers are to be set to dreaming of Lorn? Why not all five?"

"If this works out, Captain, it will be an act of salvage. And I think that Faraway Quest will be entitled to some

reward. I know how the crew and passenger lists of these ships were made up. Male and female, in equal numbers. Husbands and wives. There's a hunch of mine that the husband of the mindless woman, the religious fanatic who got you into this mess, is one of the five remaining dowsers."

"I'll check the passenger list, Commodore."

Mitchell went to the cabinet and pulled out the files. "So if it works," murmured Sonya, "we shall have our own dowser to do the same for us."

"Yes."

Mitchell put the papers back into their file. He said, "The mindless woman, as you have called her, is—or was—Mrs. Carolyn Jenkins. Her husband, John Jenkins, is also a member of the dowsing team. And now, if you'll excuse me, I'll see about waking my staff." His face was somber. "I hope, for all our sakes, that I'm not waking them for nothing."

They were down once more in the dormitory sphere, on C Level, in Sector 8. There was Grimes, and there was Sonya Verrill, and there was First Captain Mitchell. There were Todhunter and McHenry, and there was Mitchell's Medical Officer, a woman whose hard, competent features were visible behind the transparency of her helmet and who, when awakened and apprised of the situation, had wished to discuss medical matters with her opposite number from Faraway Quest. And, of couse, there was Mayhew.

First of all there was the tank in which slept Carolyn Jenkins' husband to disconnect from its fittings. Jenkins was the man who had been dreaming about food, and who was now dreaming about other pleasures of the flesh. Grimes felt more than a little relieved. This dreamer would not object to his being press-ganged away from his own ship and would not feel the loss of his wife too deeply. The nature of his dreams told of years of hunger, of frustration.

McHenry and Todhunter maneuvered the clumsy tank

through the cramped space, vanished with it in the direction of the control sphere. It was to be taken to the *Faraway Quest*, where the engineers would be able to set up the apparatus for maintaining the sleeper in his condition of suspended animation and for awakening him if Grimes' gamble paid off.

And then Mayhew went to the second of the male dowsers, the one who, in his dream, was still engaged in the exercise of his talent. The telepath vocalized his thoughts, and his voice was an eerie whisper in the helmet phones of his companions.

"You are lost. . . .

"You are lost. The sky is dark. There is no light anywhere. There is nothing anymore anywhere . . . Nothing . . . Nothing . . . Emptiness around you, emptiness underfoot . . . You are falling, falling, through the nothingness, and the rod is dead in your hands. . . .

"You are falling, falling . . .

"But not for always. The rod twitches. You feel it twitch. Feebly, but it twitches. That is all-now. That is all. But there will be more. In precisely one hundred and twenty minutes there will be more. The rod will twitch strongly, strongly, and pull you with it. You will see that it is pointing to a spark in the darkness-a golden spark. And the spark becomes a globe, becomes a fair world hanging there. There is the blue of seas, the green of continents, the gleaming white of the polar ice caps, and on the night hemisphere the sparking lights of great cities. . . . There is the blue of seas and the green of continents, and the great land mass, hourglass-shaped, that sprawls from pole to pole, with its narrow waist on the equator. . . . And the chain of islands that forms a natural breakwater to the great, eastern bay . . . But you do not see it yet. The time must pass, and then you will see it. Then the rod will come alive in your hands and will draw you,

pull you, to the fair world of Lorn, the world of your fresh start, to the sunny world of Lorn . . ."

Grimes thought, I hope that they aren't too disappointed. But even Lorn's better than Limbo . . .

And so it went on.

Each of the four remaining dowsers was thoroughly indoctrinated, and by the time that the indoctrination was finished only thirty minutes remained before the posthypnotic command would take effect. Grimes and the others made their way back to the control sphere.

Mitchell's officers were in full charge now, and the pilot lights glowed over instrument consoles. With the exception of Grimes, Sonya Verrill and Mayhew, all of Faraway Quest's people were back aboard their own ship. The Commodore turned to Mitchell. "I'll leave you to it, Captain. If things work out for all of us, I'll see you on the Rim."

Mitchell grinned. "I hope so, sir. But tell me, are the Rim Worlds as marvelous as your Mr. Mayhew makes out?"

"You have to make allowances for local patriotism, Captain."

"But you needn't stay on the Rim," Sonya Verrill broke in. "I am sure that my own Service will be happy to assume responsibility for the settlement of your people on any world of their choice."

"The Federation's taxpayers have deep pockets," remarked Grimes.

"That joke is wearing a little thin, John."

"Perhaps it is, Sonya. But it's still true."

The Commodore shook hands with Mitchell and then pulled on the gloves of his spacesuit, snapping tight the connections. His helmet on, he watched Sonya Verrill and Mayhew resume their own armor and then, with one of Mitchell's officers in attendance, the party made its way to the airlock. They jetted across the emptiness to the sleek

Faraway Quest, were admitted into their own ship. They lost no time in making their way to the control room.

And there they waited, staring at the contraption of globes and girders floating there in the nothingness, bright metal reflecting the glare of the Quest's searchlights. They waited, and watched the control room clock, the creeping minute hand and, towards the end, the sweep second pointer.

Grimes consulted his own watch.

Mayhew noticed the gesture. He said quietly, "I'm still in touch. They can see the spark in the darkness now. They can feel the rods stirring strongly in their hands. . . ."

"I don't see how it can work," muttered Renfrew.

"They got here without your gadgetry, Lieutenant," Calhoun told him sharply. "They should be able to get out the same way."

And then there was nothing outside the viewports.

Perhaps, thought Grimes, our searchlights have failed. But even then we should see a dim glimmer from her control room ports, a faint flicker from her warmed-up drivers. . . .

"The screens are dead," announced Swinton.

"She made it. . ." whispered Mayhew. "She made it. Somewhere."

XXIII

So IT HAD worked for First Captain Mitchell and his Erector Set of an emigrant ship. It had worked for First Captain Mitchell, and so it should work for Faraway Quest and her people. The shanghaied dowser was sleeping in his tank, still dreaming orginatic dreams, and Mayhew was working on him, entering his mind, trying to introduce the first faint elements of doubt, of discomfort, trying to steer his imaginings away from over-padded comfort to the cold and

emptiness of the Limbo between the Universes.

But it was hard.

This was a man who had lived in his dreams, lived for his dreams. This was a man whose waking life was, at best, purgatorial—a man who 'never knew in his own home the sweet smoothness of flesh on flesh, a man who was denied even such simple pleasures as a glass of cold ale, a meal more elaborate than a spoiled roast and ruined, soggy vegetables. This was a man who lived in his dreams, and who loved his dreams, and who had fled to them as the ultimate refuge from an unspeakably drab reality.

Mayhew persisted, and his whispering voice, as he vocalized his thoughts, brought a chill of horror into the section of the auxiliary motor room in which the tank had been set up. He persisted, and he worked cunningly, introducing tiny, destructive serpents into the fleshly Eden—the tough steak and the blunt knife, the corked wine, the too-young cheese and the rolls with their leathery crusts. . . . The insufficiently chilled beer and the hot dog without the mustard . . . The overdone roast of beef, and the underdone roast of pork . . .

Small things, trivial things perhaps, but adding up to a sadistic needling.

And then there was the blonde who, when she smiled, revealed carious teeth and whose breath was foul with decay, and the voluptuous brunette who, undressed, was living proof of the necessity for foundation garments....

So it went on.

The dream, perhaps, had not been a noble one, but it had been healthily hedonistic, with no real vice in it. And now, thanks to Mayhew's probing and tinkerings, it was turning sour. And now the man Jenkins, fleeing in disgust from the lewd embraces of a harridan in a decrepit hovel, was staggering over a dark, windy waste, oppressed by a sense of guilt and of shame, fearing even the vengeance of

the harsh deity worshipped by his unloving wife. He was fleeing over that dark, windy waste, tripping on the tussocks of coarse grass, flailing with his arms at the flapping sheets of torn, discarded newspaper that were driven into his face by the icy gusts.

The cold and the dark . . .

The cold and the dark, and the final stumble, and the helpless fall into the pit that had somehow opened beneath his feet, the fall into Absolute Nothingness, a negation worse than the fiery hell with which his wife had, on more than one occasion, threatened him.

The cold and the dark and the absolute emptiness, and the rod of twisted silver wire to which he still clung desperately, the only proof of his identity, the only link with sanity, the only guide back to Space and Time...

The twisted wire, the twitching wire, and the insistent tug of it in his frozen hands, and ahead of him in the darkness the faint yellow spark, but brighter, brighter, golden now, no longer a spark but a fair world hanging there in the blackness, a world of beautiful, willing women, of lush gardens in which glowed huge, succulent fruit, a world of groaning tables and dim, dusty cellars in which matured the stacked bottles of vintage years . . .

But not Lorn . . . thought Grimes.

"But not Lorn . . ." echoed Sonva.

"Lorn is hanging there in the darkness..." Mayhew was whispering. "A fair world, a beautiful world... And the divining rod is rigid in your hands, a compass needle, pointing, pointing... You can cross the gulf.... You can bridge the gulf from dream to reality... Follow the rod.... Let the rod guide you, draw you, pull you.... Follow the rod...."

"But where?" interrupted Grimes. "But where?"

"To Lorn, of course," whispered Mayhew. And then, "To Lorn? But his dreams are too strong, too strong..."

Shockingly the alarm bells sounded, a succession of Morse "A"s.

Once again-Action Stations.

XXIV

THERE, TO PORT, was the lens of the Galaxy, and to star-board was the gleaming globe that was Lorn, the great, hourglass-shaped continent proof positive. From astern came the rumble of the gentle blasts fired by Swinton, intent on his instruments, that would put Faraway Quest into a stable orbit about the planet. From the speaker barked an oddly familiar voice, "What ship? What ship? Identify yourself at once." And at the controls of the transceiver Renfrew made the adjustments that would bring in vision as well as sound.

"What ship?" demanded the voice. "What ship?"

From his chair Grimes could see the screens of both radar and Mass Proximity Indicator. He could see the bright and brightening blob of light that gave range and bearing of another vessel, a vessel that was closing fast. She was not yet within visual range, but that would be a matter of minutes only.

"What ship? What ship?"

Grimes accepted the microphone on its wandering lead, said, "Faraway Quest. Auxiliary Cruiser, Rim Worlds Confederation Navy. What ship?"

The voice from the bulkhead speaker contrived to convey incredulity with an odd snorting sound. "Faraway Quest? Rim Worlds Confederation? Never heard of you. Are you mad—or drunk?"

"No," Sonya Verrill was whispering. "No. It can't be. . . ."
Grimes looked at her, saw that her face was white, strained.

The big screen over the transceiver was alive with swirling

colors, with colors that eddied and coalesced as the picture hardened. It showed the interior of another control room, a compartment not unlike their own. It showed a uniformed man who was staring into the iconoscope. Grimes recognized him. In his, Grimes', Universe this man had been Master of Polar Queen, had smashed her up in a bungled landing at Port Farewell, on Faraway. Grimes had been president of the Court of Inquiry. And this man, too, had been an officer of the Intelligence Branch of the Survey Service, his position as a tramp master being an excellent cover for his activities. And he and Sonya...

The Commodore swiveled in his chair. He rather prided himself on the note of gentle regret that he contrived to inject into his voice, He said to the woman, "Well, your quest is over. It's been nice knowing you."

She replied, "My quest was over some time ago. It's nice knowing you."

"I've got their picture," Renfrew was saying unnecessarily.
"But I don't think that they have ours yet."

"Starfarer to unknown ship. Starfarer to unknown ship. Take up orbit and prepare to receive boarding party."

"You'd better go and pretty yourself up," said Grimes to Sonya. He thought, It's a pity it had to end like this, before it got properly started even. But I mustn't be selfish.

"You'll be meeting . . . him. Again. Your second chance." "Starfarer to unknown ship. Any hostile action will meet with instant retaliation. Prepare to receive boarders."

"Commander Swinton!" There was the authentic Survey Service crackle in Sonya Verrill's voice. "Stand by Mannschenn Drive. Random precession!"

"Ay, ay, sir." The young man flushed: "Ma'am." Then he swiveled to look at the Commodore. "Your orders sir?"

"John!" Sonya's voice and manner were urgent. "Get us out of here."

"No. This was the chance you were wanting, the second chance, and now you've got it."

She grinned. "A girl can change her mind. I want my own Universe, where there's only you . . ." She laughed, pointing to the screen. A woman officer had come into Starfarer's control room, was standing behind the Captain's chair. He outranked her, but her attitude was obviously proprietorial. "Where there's only you," repeated Sonya, "and only one of me . . ."

"Mannschenn Drive," ordered Grimes. "Random precession."

"Ay, ay, sir," acknowledged Swinton, and with the thin, high keening of the precessing gyroscopes the screen blanked, the speaker went dead and, on the port hand, the Galactic lens assumed its familiar distortion, a Klein flask blown by a drunken glass blower.

"Sir," growled Renfrew, obviously in a mutinous mood, "they could have helped us to get back. And, even if they couldn't, I'm of the opinion that the Rim Worlds under Federation Rule would have been somewhat better than those same planets under your Confederacy."

"That will do, Lieutenant," snapped Sonya, making it plain that she was capable of dealing with her own subordinates. "Both the Commodore and myself agreed upon our course of action."

"This was supposed to be a scientific expedition, Commander," protested Renfrew. "But it's been far from scientific. Séances, and dowsers..." He almost spat in his disgust.

"You can't deny that we got results," muttered Calhoun.
"Of a sort."

Grimes, seated at the table on the platform in the still unreconverted wardroom, regarded the squabbling officers with a tired amusement. He could afford to relax now. He had driven the ship down the warped Continuum in an

escape pattern that had been partly random and partly a matter of lightning calculation. He had interrogated Maudsley—the other Maudsley—after the Polar Queen disaster and had not formed a very high opinion of that gentleman's capabilities as a navigator. And even if this Maudsley were brilliantly imaginative, a ship in Deep Space is a very small needle in a very big haystack. . . .

"Gentlemen," he said, "the purpose of this meeting is to discuss ways and means of getting back to our own Space-Time. Has anybody any suggestions?"

Nobody had.

"The trouble seems to be," Grimes went on, "that although the dowser technique works, Mr. Mayhew is far too liable to look at his home world through rose-colored spectacles. Unluckily he is the only one among us capable of influencing the dreams of the hapless Mr. Jenkins. No doubt the Rim Worlds are better off, in some respects, under Federation rule than under our Confederacy. Weather control (which is far from inexpensive) for example, and a much higher standard of living. But I've also no doubt that the loss of independence has been a somewhat high price to pay for these advantages. And, even you who are not Rim Worlders, would find it hard to get by in a Universe in which somebody else, even if it is you, has your job, your home, your wife.

"So-what are we to do?"

"We still have Jenkins," contributed Calhoun.

"Yes. We still have Jenkins. But how can we use him?"

"And you still have your talent," said Sonya.

"My talent?"

"Your hunches. And what is a hunch but a form of precognition?"

"My hunches," Grimes told her, "are more a case of extrapolation, from the past at that, than of precognition." And sitting there, held in his chair by the strap, he let

his mind wander into the past, was only dimly conscious of the discussion going on around him. He recalled what had happened when Faraway Quest had been drawn into the first of the Alternative Universes before falling into Limbo. He remembered that odd sensation, the intolerable stretching, the sudden snap. Perhaps . . . "Mr. Mayhew!" he said.

"Yes? Sorry. Yes, sir?"

"What sort of feeling do you have for this ship?"

"She's just a ship."

"You don't, in your mind, overglamorize her?"

"Why the hell should I? Sir."

"Good. Please come with me again to this man Jenkins, the dowser. I want you to take charge of his dreams, the same way that you did before. I want you to lose him in nothingness again, and then to let his talent guide him out of the emptiness back to light and life and warmth".

"But you said that my vision of Lorn was too idealistic."
"It is. It is. I want you to envisage Faraway Quest."

"Us, sir?"

"Who else?"

"The cold . . ." Mayhew was whispering. "The cold, and the dark, and the absolute emptiness. There's nothing, nothing. There's not anything, anywhere, but that rod of twisted silver wire that you hold in your two hands. . . . You feel it twitch. You feel the gentle, insistent tug of it. . . And there's a glimmer of light ahead of you, faint, no more than a dim glow. . . . But you can make out what it is. It's the pilot lights of instrument panels, red and green, white and amber, and the fluorescent tracings in chart tanks. . . . It's the control room of a ship, and the faint illumination shows through the big, circular ports. By it you can just read the name, in golden lettering, on her sharp stem, Faraway Quest."

And Mayhew went on to describe the ship in detail,

in amazing detail, until Grimes realized that he was drawing upon the knowledge stored in the brains of all the technical officers. He described the ship, and he described the personnel, and he contrasted the warmth and the light and the life of her interior with the cold, empty dream-Universe in which the dowser was floating. He described the ship and her personnel—and, Grimes thought wrily, some of his descriptions were far from flattering. But she was Home. She was a little world of men in the all-pervading emptiness.

She was Home, and Grimes realized that he, too, was feeling the emotions that Mayhew was implanting in the sleeping dowser's mind. She was Home, and she was close, and closer, an almost attained goal. She was Home, and Grimes knew that he could reach out to touch her, and he reached out, and felt the comforting touch of cool metal at his fingertips, the security of solidity in the vast, empty reaches of Deep Space. . . .

She was Home, and he was home at last, where he belonged, and he was looking dazedly at the odd, transparent tank that had appeared from nowhere in the Auxiliary Machinery Room, the glass coffin with a complexity of piping and wiring extruded from its sides, the casket in which floated the nude body of a portly man.

He turned to Sonya Verrill, and he heard her say, "Your hunch paid off, John."

He remembered then. (But there were two sets of memories—separate and distinct. There were the memories of Limbo, and all that had happened there, and there were the memories of a boring, fruitless cruise after the first and only Rim Ghost sighting and the failure to establish even a fleeting contact.) He remembered then, and knew that some of the memories he must cling to, always. They were all that he would ever have, now. There were no longer any special circumstances. There was no longer the necessity

for—how had she put it?—the political marriage of the heads of two potentially hostile tribes.

He muttered, unaware that he was vocalizing his thoughts, "Oh, well—it was nice knowing you. But now . . ."

"But now . . ." she echoed.

"If you'll excuse me, sir, and madam," broke in Mayhew, "I'll leave you alone. Now that we're back in our own Universe I'm bound by the Institute's rules again, and I'm not supposed to eavesdrop, let alone to tell either of you what the other one is thinking." He turned to the Commodore. "But I'll tell you this, sir. I'll tell you that all the guff about political marriages was guff. It was just an excuse. I'll tell you that the lady has found what she was looking for—or whom she was looking for—and that his name is neither Derek Calver nor Bill Maudsley."

"In the Survey Service," remarked Sonya Verrill softly, "he could be court martialed for that."

"And so he could be," Grimes told her, "in the Rim Confederacy Navy. But I don't think that I shall press any charges."

"I should be rather annoyed if you did. He told you what I should have gotten around to telling you eventually, and he has saved us a great deal of time."

They did not kiss, and their only gesture was a brief contact of hands. But they were very close together, and both of them knew it. Together they left the compartment, making for the control room.

Grimes supposed that it would be necessary to carry on the cruise for a while longer, to continue going through the motions of what young Swinton had termed a wild ghost chase, but he was no longer very interested. A long life still lay ahead of him, and there were pleasanter worlds than these planets of the far outer reaches on which to spend it.

For him, as for Sonya Verrill, the faraway quest was over.