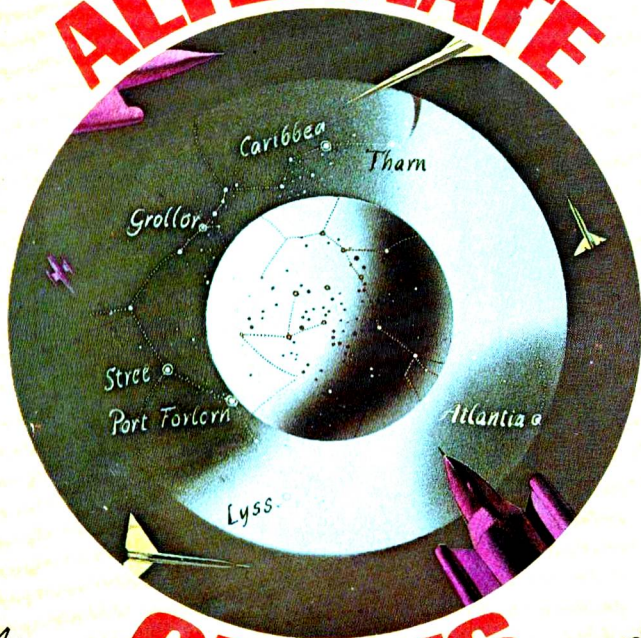


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"When Kinsolving's Planet crosses your path, beware!"

Commodore John Grimes would have done well to heed this warning. But the evil magic of Kinsolving draws him on, pulling him on a journey through the universes. Is Grimes a swiftly fading literary ghost, doomed to disappearance for the inadvertent theft of a meerschaum pipe? Or, is he a flesh and blood Commodore, sailing the spaceways from world to world, enjoying dangerous voyages to momentary safe ports?

It does not matter what role is the "true John Grimes" for none can protect him from the grasp of Kinsolving's Planet, an abandoned colony which reaches out for man, for the target, John Grimes, who is inexorably sucked toward his final destiny. . . .

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*Cover by Karel Thole.*

*For my favorite wife.*

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THE DARK DIMENSIONS

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## HALL OF FAME

SONYA GRIMES was unpacking. Grimes watched her contentedly. She was back at last from her galactic cruise, and the apartment was no longer just a place in which to live after a fashion, in which to eat lonely meals, in which to sleep in a lonely bed. It was, once more, home.

She asked lightly, "And have you been *good* while I've been away?"

"Yes," he replied without hesitation, bending the truth only slightly. There had been that girl on Mellise, of course, but it had all been in the line of duty. A reminiscent grin softened his craggy features. "So good, in fact, that I was given the honorary rank of Admiral on Tharn . . ."

She laughed. "Then I'd better give you something too, my dear. Something I know you'll like . . ." She fell gracefully to her knees beside a suitcase that she had not yet opened, unsnapped and lifted up the lid, plunged a slender hand into a froth of gossamer undergarments. "Ah, here it is. I didn't want it to get broken . . ."

It was a leather case and, although it obviously had been well cared for, it was worn and cracked, was ancient rather than merely old. The Commodore took it carefully from his wife, looked at it with some puzzlement. Its shape was clue enough to what it contained, but Grimes had never guessed that such homely and familiar masculine accessories could ever possess any value other than a strictly utilitarian one.

"Open it!" she urged.

Grimes opened the case, stared in some bewilderment at the meerschaum pipe that was revealed, archaic and fragile in its nest of faded plush.

"There was a little shop in Baker Street," she said, speaking rapidly. "An antique shop. They had this. I knew you'd like it . . ."

"Baker Street . . ." he repeated. "In London? On Earth?"

"Of course, John. And you *know* who lived there . . ."

Yes, thought Grimes. *I know who lived there. And he smoked a pipe, and he wore something called a deerstalker hat. The only trouble is that he never lived at all in real life. Oh Sonya, Sonya, they must have seen you coming. And how much did you pay for . . . this?*

"Think of it," she went on. "Sherlock Holmes's own pipe . . ."

"Fantastic."

"You don't like it?" Neither of them was a true telepath, but each was quick to sense the mood of the other. "You don't like it?"

"I do," he lied. But was it a lie? The thought behind the gift was more important, much more important than the gift itself. "I do," he said, and this time there was no smallest hint of insincerity in his voice. He put the precious pipe down carefully on the coffee table. "But you've brought yourself back, and you're worth more to me than Sherlock Holmes's pipe, or Julius Caesar's bloodstained toga, or King Solomon's mines. Come here, woman!"

"That's an odd-looking weapon you've got, Grimes," remarked Admiral Kravinsky.

The Commodore laughed. "Yes, and there's quite a story attached to it, sir. Sonya bought it for me in London—and you'd think that a woman who holds a commission in the Intelligence Branch of the Survey Service would have more intelligence than to be taken in by phony antiques! This, sir, is alleged to be the actual pipe smoked by the great Sherlock Holmes himself."

"Really?"

"Yes, really. But I'll say this for Sonya, she's got a sense of humor. After I'd explained to her in words of one syllable that Sherlock Holmes was no more than a fictional character she saw the joke, even though it was on her . . ."

"And on you."

"I suppose so. When I think of all the first class London briars that could have been purchased for the same money . . ."

"I'm surprised that you're smoking *that*. After all, a secondhand pipe . . ."

"Sonya's thorough. She took the thing to the nearest forensic laboratory to have it examined. They assured her that it was untouched by human hand—or lip. It's a perfectly good meerschaum, recently manufactured and artificially aged. So she said that she liked to see her husband smoking the most expensive pipe in the Rim Worlds. It's not a bad smoke either . . ."



"Don't drop it," warned the Admiral. "Whatever you do, don't drop it." Then the tolerant smile vanished from his broad, ruddy features. "But I didn't send for you to discuss your filthy smoking habits." He selected a gnarled, black cigar from the box on his desk, lit it. "I've a job for you, Grimes. I've already spoken to Rim Runners' management and arranged for your release for service with the Reserve."

Normally Grimes would have been pleased, but with Sonya just back . . .

"The Federation has a finger in this particular pie as well, Grimes. And as their Commander Sonya Verrill is back in Port Forlorn she may as well go along with you."

Grimes's face cleared.

"And this *will* please you, Commodore. I haven't any warships to spare, and so your beloved *Faraway Quest* will be recommissioned, with you in full command. The selection of personnel will be up to you."

"And what is the job, sir?" asked Grimes.

"A detailed, leisurely investigation of Kinsolving's Planet. We all of us tend to shy away from that ruddy world—but, after all, it is in our back garden. And after those outsiders from Francisco landed there to carry out their odd experiments . . ."

"I was there too," said Grimes.

"Well I bloody well know it. And I had to organize the rescue party. Anyhow, you're our expert on Rim World oddities. Things seem to happen around you rather than to you. If anybody falls through a crack in the continuum the odds are at least a hundred to one that Commodore Grimes, Rim Worlds Naval Reserve, will be lurking somewhere in the background . . ."

"I've been in the foreground too, sir."

"I know, Grimes, I know. But you always survive, and the people with you usually survive. I had no hesitation in recommending you for this . . . survey. Yes, I suppose you could call it that, although what you'll be surveying God knows."

"Which god?" asked Grimes, remembering vividly what had happened to the expedition from Francisco.

"Fill me in," ordered Sonya. "Put me in the picture."

"I wrote to you," said Grimes. "I told you all about it."

"I never received the letter."

## ALTERNATE ORBITS

"It must still be chasing you. Well, you know of Kinsolving's Planet, of course . . ."

"Not as much as I should, my dear. So just make believe that I've just come out to the Rim, and that I was never in the Intelligence Branch of the Survey Service. Start from there."

"You have access to all the official reports, including mine."

"I prefer to hear the story in less formal language. I never did care for officialese."

"Very well, then. Now, Kinsolving's Planet. It's one of the Rim Worlds, and it was colonized at the same time as the others, but the colonization didn't stick. There's something . . . odd about the atmosphere of the place. No, not chemically, or physically. Psychologically. There are all sorts of fancy theories to account for it; one of the more recent is that Kinsolving lies at the intersection of stress lines; that there the very fabric of space and time is stretched almost to bursting; that the boundaries between *then* and *now*, between *here* and *there*, are so thin as to be almost nonexistent. Oh, I know that the same sort of thing has been said often enough about the Rim Worlds in general—but nowhere is the effect so pronounced as on Kinsolving. People just didn't like living on a world where they could never feel sure of *anything*, where there was always the dread at the back of their minds that the Change Winds would reach gale force at any tick of the clock. So, when their suicide rate had risen to an unprecedented level and their nut hatches were crammed to capacity, they got the hell out.

"That was that. And then, a century and a half ago, Galactic Standard, one of the Commission's tramps, *Epsilon Eridani*, made an emergency landing at the spaceport. She had to recalibrate the controls of her Mannschenn Drive and, as you know, that's best done on a planetary surface. It could be that the temporal precession fields set up while this was being done triggered some sort of continuum-warping chain reaction . . . Anyhow, a few of the officers were allowed shore leave, and they decided to explore the famous caves, which were not far distant. In these caves are remarkably well-preserved rock paintings, made by the Stone Age aborigines who once lived on Kinsolving. (What happened to *them*, nobody knows. They just vanished, millennia before the first humans landed.) They returned to their ship

in quite a dither, reporting that the paint of some of the pictures of various animals was *wet*.

"The Federation's Survey Service finally got to hear about this and sent a small team of investigators, one of them a very well-qualified young lady from the Rhine Institute. They found the rock paintings without any trouble—and found that a new one had been added, one depicting men in the standard spaceman's rig of that period. While they were standing around marveling they were pounced upon by a horde of cavemen and made prisoner.

"But the Rhine Institute's star graduate was equal to the occasion. Telepathy, teleportation, psychokinesis—you name it, she had it. The party escaped with a prisoner of their own, the artist in person. His name was Raul . . .

"And, back on Earth, Raul became a pet of the Rhine Institute himself. He was a very specialized kind of painter. When he drew an animal, that animal was drawn, in the other sense of the word, to within range of the weapons of the hunters. He was also a telepath, and after the Institute had just about sucked him dry he went to Francisco to become chief psionic radio officer of the Deep Space Communications Station on that world. By this time he'd married the wench who'd captured him and, although he wasn't human, strictly speaking, the genetic engineers were able to make certain modifications to his body so that the union was a fruitful one.

"You've been to Francisco, of course. You know how religion is almost a primary industry on that planet. Raul got religion—and became, of all things, a neo-Calvinist, as did all his family. His great-granddaughter fell from grace with a loud thud and became one of the so-called Blossom People . . ."

"So there's a woman mixed up in it!" commented Sonya.

"Look around, my dear, and you'll find a woman mixed up in almost everything. But where was I? Yes, Clarisse. She rather overdid things—drink, sex, drugs—and was picked up out of the gutter and brought back into the fold. But the neo-Calvinists weren't being charitable. They knew that she had inherited her ancestor's talents, and they knew that certain of the psychedelic drugs amplified these same talents, and so . . ."

"And so?" she echoed.

"And so some perverted genius cooked up a scheme that

even now makes me shudder. The idea was that she should be taken to Kinsolving and there, on a suitable mountain top, invoke by her graphic art and magic the God of the Old Testament, in the pious hope that He would provide for the neo-Calvinists a new edition of the Ten Commandments. That bunch of unspeakable wowzers had to get the permission of the Confederacy, of course, before they could land on Kinsolving—and so my lords and masters decided that Commodore Grimes, Rim Worlds Naval Reserve, should go along as an observer . . .”

“You never tell me anything.”

“I wrote to you about it. And it’s all in the reports that you, as the senior representative of the Survey Service’s Intelligence Branch on the Rim Worlds, should have read by now. Besides, I’ve hardly had a chance to get a word in edgewise since you came home.”

“Never mind that. What happened?”

“They set up shop on top of the mountain that they’d decided was the new Sinai. Clarisse, after the proper preparations, painted a picture of a suitably irate-looking, white-bearded deity . . . The trouble was, of course, that so many of those patriarchal gods looked alike. And the Blossom People’s religion is a pantheistic one. Cutting a long and sad story short—what we got wasn’t Sinai, but Olympus . . .”

There was a long silence. And then, “If I didn’t know you, and if I didn’t know from personal experience what odd things do happen out on the Rim, I’d say that you’d missed your vocation, that you should be a writer of fairy stories . . . But you assure me that all this is in the reports?”

“It is. And Clarisse is still on Lorn. She married Mayhew. I was thinking that we might have them round tomorrow evening. And they’ll be coming with us in the *Quest*, in any case.”

“But what’s our expedition supposed to be in aid of?” she demanded. “You’re leading it, and I shall be your second-in-command; and two more unlikely people to be involved in any sort of religious research, I can’t think of.”

The Commodore smiled a little crookedly. “I’ll tell you what Kravinsky said to me. ‘It boils down to this, Grimes. Both the Confederacy and our big brothers of the Federation think that something should be done about Kinsolving. Nobody is quite sure what. So I’m sending you, with your usual crew of offbeats and misfits, and if you bumble around

in your inimitable manner *something* is bound to happen . . . ”

Sonya grinned back at him. “The man could be right,” she said.

Finally—the recommissioning of a long laid up vessel takes time, *Faraway Quest*, Commodore John Grimes commanding, lifted slowly from Port Forlorn. She was well-manned; Grimes had selected his crew, both spacefaring personnel and civilian scientists and technicians, with care. The officers of all departments were, like the Commodore himself, naval reservists, specialists in navigation and gunnery and engineering: in ship’s biochemistry. And there was the Major of Marines—also, as were his men, a specialist. Grimes hoped that the spaceborne soldiers’ services would not be needed, but it was good to have them along, just in case. There was Mayhew, one of the few psionic radio officers still on active service, youthful in appearance but old in years; and Clarisse, really beautiful since her marriage and her breakaway from the neo-Calvinists and their severe rules regarding dress and decorum, her hair styling revealing the pointed ears inherited from her nonhuman ancestor. There were the two fat, jolly men from the Dowser’s Guild who, even in this day and age, were shunned by the majority of the scientists. There were men and women whose specialty was the measurement of radiation, others whose field was chemistry, organic and inorganic. There were archeologists, and paleontologists, and . . .

“One more specialist, Grimes,” Admiral Kravinsky had growled, “and that old bitch of yours won’t be able to lift a millimeter . . . ”

But a converted freighter, with all space properly utilized, has quite amazing capacity insofar as the carrying of passengers is concerned.

So she lifted, her inertial drive running sweetly and uncomplainingly, with Grimes himself at the controls, all the old skill flowing back into his fingers, the ship an extension of his fit, stocky body, obedient to his will, as were his officers grouped around him in the control room, each in his own chair with his own bank of instruments before him.

She lifted, accelerating smoothly, soaring up to the low cloud ceiling, and through it, breaking out into the steely sunlight of high altitudes, driving up to the purple sky that soon deepened to black, into the darkness where glimmered

the few, faint stars of the Rim, where, rising above the gleaming arc that was the sunlit limb of the planet, glowed the misty ellipsoid that was the Galactic Lens.

Sonya, who had traveled vast distances as a passenger, said quietly, "It's good to see this from a control room again."

"It's always good . . ." said Grimes.

*Faraway Quest* was clear of the atmosphere now, still lifting, and below them the planet presented the appearance of a huge, mottled ball, an enormous flawed pearl lustrous against the black immensities. She was clear of the Van Allen, and Grimes snapped an order. The Senior Communications Officer spoke quietly into his intercom microphone. "Attention all! Attention all! There will be a short countdown, from ten to zero. The inertial drive will be shut off, after which there will be a period of free fall, with brief lateral accelerations as trajectory is adjusted." He turned to the Commodore. "Ready, sir?"

Grimes studied the chart tank. "Now!" he said.

"Ten . . ." began the officer. "Nine . . ."

Grimes looked to Sonya, raised his heavy eyebrows and shrugged. She shrugged back, and made even this gesture graceful. She knew, as he knew, that all this formality was necessary only because there were so many civilians aboard.

". . . Zerol"

The irregular, throbbing beat of the inertial drive suddenly ceased and there was brief weightlessness and a short silence. Then there was the hum of the maneuvering gyroscopes, rising to a whine, and centrifugal force gently pressed those in Control to the sides of their chairs. Slowly, slowly, the target star, the Kinsolving sun, drifted across the black sky until the glittering spark was centered in the cartwheel sight, wavered, then held steady. The inertial drive came on again, its broken rumble a bass background to the thin, high keening of the ever-precessing rotors of the Mannschenn Drive. Ahead, save for the tiny, iridescent spiral that was the target sun, there was only emptiness. Lorn was to starboard; a vast, writhing planetary amoeba that was dropping back to the quarter, that was dwindling rapidly. And out to port was the Galactic Lens, distorted by the temporal precession field of the Drive to the similitude of a Klein flask blown by a drunken glassblower.

Grimes rather wished, as he had often wished before,

that somebody would come up with another way of describing it. He doubted if anybody ever would.

This was a far more pleasant voyage than the one that he had made to Kinsolving in the unhappy *Piety*. To begin with, he had Sonya with him. Second, he was in command, and the ship was being run his way. *Faraway Quest* was no luxury liner, but she was warm, comfortable. Her internal atmosphere carried the scents of women's perfume, of tobacco smoke, of good cooking—not that omnipresent acidity of disinfectant. The snatches of music that drifted through her alleyways from the playmasters in the public rooms were anything and everything from grand opera to the latest pop, never the morbid hymns and psalms in which the neo-Calvinists had specialized. He spoke of this to Clarisse. She grinned and said, "You're not with it, Dad. You're just not with it. By *our* standards this wagon is bitter ends-ville, just a spaceborne morgue."

He grinned back. "If the best that the Blossom People can do is to resurrect the hip talk of the middle twentieth century, I doubt if you're with it either."

"Every religion," she told him seriously, "uses archaic language in its scriptures and in its rituals." Then she laughed. "I'm not complaining, John. Believe me, I'm not complaining. When I look back to the *Piety*, and Rector Smith and Presbyter Cannan, and that she-dragon of a deaconess, I realize how lucky I am. Of course, I could have been luckier . . ."

"How so?"

"That tall, beautiful redhead of yours could have been left behind."

"To say nothing of that highly capable telepath you're married to."

Her face softened. "I was joking, John. Before I met Ken—before I met him physically, that is—something might have been possible between us. But I'm well content now, and I feel that I owe it all to you. Ken was against our coming on this expedition, but I insisted. I'll do anything I can to aid your . . . researches."

"Even to a repeat performance?"

"Even to a repeat performance."

"I hope it doesn't come to that."

"Frankly, John, so do I."

The voyage was over. *Faraway Quest*, her Mannschenn Drive shut down, her inertial drive ticking over just sufficiently to induce a minimal gravitational field, was falling in orbit about the lonely world, the blue and green mottled sphere hanging there against the blackness. The old charts were out, and the new ones too, made by Grimes himself with the assistance of the officers of *Rim Sword*. "Here," said the Commodore, stabbing a blunt forefinger down onto the paper, "is where the spaceport *was*. There's only a crater there now. Whoever or whatever destroyed *Piety* made a thorough job of it. And here's the city—Enderston it was called—on the east bank of the Weary River . . ."

"Where even the weariest river winds somewhere safe to sea . . ." quoted Sonya. "They must have been a cheerful bunch, those first colonists."

"I've already told you that the very atmosphere of the planet engenders morbidity. And there, on the shore of Darkling Tarn, is what was the Sports Stadium, where *Rim Sword* landed. In the absence of any spaceport facilities it's as good a place as any." He turned from the chart to the big screen upon which a magnification of the planet was presented. "You can see it all there—just to the east of the sunrise terminator. That river, with all the S bends, is the Weary, and that lake which looks like an octopus run over by a streamroller is Darkling Tarn. The city's too overgrown for it to show up at this range."

"You're the boss," said Sonya.

"Yes. So I suppose I'd better do something about something." He turned to his executive officer. "Make it landing stations, Commander Williams."

"Landing stations it is, sir."

The officers went to their acceleration chairs, strapped themselves in. In seconds the intercom speakers were blating, "Secure all for landing stations! Secure all for landing stations! All idlers to their quarters!" And then the maneuvering gyroscopes hummed and whined as the ship was tilted relative to the planet until the surface was directly beneath her. The sounding rockets were discharged as she began her descent, each of them releasing a parachute flare in the upper atmosphere, each of them emitting a long, long streamer of white smoke.

*Faraway Quest* dropped steadily—not too fast and not too slow. Grimes made allowance for drift and, as the first of the



flares was swept west by a jet stream, he applied lateral thrust. Down she dropped, and down, almost falling free, but always under the full control of her master. The picture of the surface on the target screen expanded. The city could be seen now, a huddle of ruins on the river bank, and beside the lake there was the oval of the Stadium, *Eau de Nil* in the midst of the indigo of the older growth. The last of the flares to have been fired was still burning down there, the column of smoke rising almost vertically. The brush among which it had fallen was slowly smoldering.

Grimes shivered. The feeling of *déjà vu* was chillingly uncanny. But he had seen this before. He had been here before—and, save for the different choice of landing site, circumstances had been almost exactly duplicated, even to that luckily unenthusiastic bush fire. And again there was the sensation that supernal forces—malign or beneficent?—were mustering to resist the landing of the ship.

But she was down at last.

There was the gentlest of shocks, the faintest of creakings, the softest sighing of the shock absorbers as the great mass of the vessel settled in her tripodal landing gear. She was down. "Finished with engines!" said Grimes softly. Telegraph bells jangled, and the inertial drive generators muttered to themselves and then were still. She was down, and the sougling of the fans intensified the silence.

Grimes turned in his swivel chair, looked toward the distant mountain peak, the black, truncated cone sharp against the blue sky. "Sinai," Presbyter Cannan had named it. "Olympus," Grimes had called it on his new charts. It was there that the neo-Calvinists had attempted to invoke Jehovah, and there that the old gods of the Greek pantheon had made their disastrous appearance. Grimes hoped that he would never have to set foot upon that mountain top again.

He was not first off the ship; after all, this was no newly discovered planet, this was not a historic first landing of Man. The honor fell to the Major of Marines, who marched smartly down the ramp at the head of his clattering column of space soldiers. He barked orders and the detachment broke up into its component parts, fanning out from the landing site, trampling through the bushes. From somewhere came a sharp rattle of machine-pistol fire. The Commodore was not concerned. He said, "There'll be fresh pork or rabbit

on the table in the Marines' mess tonight. Or pigburger or rabbitburger if the man who fired was too enthusiastic."

"Pigs? Rabbits?" inquired Sonya.

"Descendants of the livestock brought here by the original colonists. They—the pigs, probably—seem to have wiped out most of the indigenous fauna. And, come to that, the hens and the sheep and the cattle." He lit his pipe. "They were, I suppose, the two species best fitted to survive. The pigs with their intelligence, the rabbits with their ability to go underground and to breed . . . like rabbits."

She said, "I could do with some fresh air after weeks of the tinned variety. What's good enough for pigs and rabbits and Marines is good enough for me."

"Just as well that the gallant Major didn't hear you say that. Commander Williams!"

"Sir!" replied the burly Executive Officer.

"Shore leave is in order, as long as a full working watch—and that includes the manning of weaponry—is left aboard the ship at all times. And every party of boffins is to be accompanied by at least one officer or one Marine other rank, armed. Nobody is to go down the ramp without checking out or without wearing his personal transceiver. Apart from that, we'll make this a day of general relaxation. After all, there are no physical dangers on this world. As for the other kind—I doubt if the Federation's Grand Fleet could cope with them."

"Good-oh, Skipper," replied Williams.

Grimes glared at him, then laughed. "I wondered how long it would be before the veneer of your last drill in the Reserve wore off. Anyhow, those are the orders—and just try to remember now and again that this is an auxiliary cruiser of the Rim Worlds Navy, not your beloved *Rim Mamelute*." He closed on a formal note. "The ship is yours, sir, until my return."

"The ship is mine, sir, until your return."

Then Grimes and Sonya went down to their quarters, replaced their light uniform sandals with knee-high boots, strapped on their wrist transceivers, buckled on the belts from which depended their holstered hand weapons. The Commodore was sure that these would never be required but, as leader of the expedition, he could not break the orders that he had issued. It was, he already knew, warm

outside; the slate gray shorts and shirts that he and his wife were wearing would be adequate.

They made their way down to the after airlock, checked out with the officer on gangway duty, walked slowly down the ramp. The fresh air was good, and the last traces of smoke from the now dead fire added a pleasant tang to it. The light of the sun, past its meridian and now dropping slowly to the west, was warm on the exposed portions of their bodies. (*I made much better time down than Rector Smith did in his Piety*, thought Grimes smugly. It had been late afternoon when that ship had landed.) And yet there was a chill in the air—psychological rather than physical. There was a chill in the air, and with the scent of green growing things there was a hint of corruption.

Sonya shivered. "There's something . . . wrong," she stated. "That's why we're here," Grimes told her.

They were met by the Major. He was returning to the ship, seven of his men behind him. Four of them carried the bodies of two large boars, slung on branches; the others were loaded down with rabbits. The young officer saluted cheerfully. "Enemy beaten off, sir, with heavy casualties."

"So I see, Major. But this is more than a hunting party, you know."

"I know, sir. I've set alarms all around the field so that we shall be alerted if anything large and dangerous approaches."

"Good."

Grimes and Sonya walked on, picking their way with care over the tangle of tough vines, making their slow way toward what had once been the Stadium's grandstand, now a terraced, artificial hillock overgrown with flowering creepers. They saw the two dowsers, stumbling about happily with their gleaming divining rods in their hands, trailed by a bored-looking junior officer. They passed a party of the more orthodox scientists setting up a piece of apparatus that looked like a miniature radio telescope. They met Mayhew and Clarisse.

"Do *you* feel it?" demanded the Psionic Radio Officer. "Do *you* feel it, sir? None of these others seem to."

"Yes, I feel it. And so does Sonya."

"Like something that has been waiting for us for a long time. Like something getting ready to pounce. But it's not sure that it has the strength anymore . . ."

"Yes . . . I thought myself that the ominous atmosphere wasn't quite so pronounced as when I was here last. What do you think, Clarisse? You were here too."

"I'm not as scared as I was then, John. But there are reasons for that."

"It's pronounced enough for me," said Sonya.

"It's here still," admitted Grimes. "But it could be fading. It could be that this planet has been at the very focus of . . . forces, and now the focus is shifting." He laughed. "We shan't be at all popular if, after our masters have sent us here at enormous expense, nothing happens."

"Frankly," said Clarisse, "I hope nothing does."

Nothing did.

Day followed day, and the parties of scientists spread out from around the landing site, on foot and in *Faraway Quest's* pinnaces. The archeologists grubbed happily in kitchen middens that they discovered on the banks of the lake and the river, penetrated the caves and photographed the famous paintings in a wide range of illuminations. Nothing new was found in the middens, no evidence that would throw any light at all on the disappearance of the aboriginal race. The rock paintings were just rock paintings, the pigments dry and ancient. The dowsers dowsed, and discovered deposits of metals that would be valuable if the planet were ever recolonized, and found oil, and mapped the meanderings of underground streams in desert areas. The other specialists plotted and measured and calculated—and found nothing that could not have been found on any Earth-type planet.

"At least," said Grimes, "we've proven that this world is suitable for resettlement." He, with Sonya and Clarisse and Mayhew, was sitting over after dinner coffee in his comfortable day cabin. "All hands are really enjoying a marvelous outdoor holiday."

"Except us," said Sonya in a somber voice.

"There's a reason for that, my dear. You're sensitive to my moods, as I am to yours. And I had such a scare thrown into me when I was here last that I could never feel at ease on this planet. And Clarisse was more frightened than I was—and with good reason!—and all the time she was in telepathic touch with Mayhew."

"I still say that there's something wrong," insisted Mayhew. "I still say that we should be absolutely sure before we

put in a report recommending another attempt at colonization."

Grimes looked at Clarisse. "Would you be willing to repeat that experiment?" he asked.

She replied without hesitation. "Yes. I was going to suggest it. I've talked it over with Ken. And I feel that if I try to call those old gods, rather than the deity of the neo-Calvinists, the results might be better. It could be that it is in their interests that this world be peopled again—this time with potential worshippers."

"Like your Blossom People," said Mayhew, unmaliciously.

"Yes. Like the Blossom People. After all, the slogan *Make Love, Not War*, would appeal to Aphrodite if not to Ares . . ."

Grimes laughed, but without real humor. "All right, Clarisse. We'll arrange it for tomorrow night. And we'll have all hands out of the ship and well scattered just in case Zeus is too handy with his thunderbolts again. Williams has been getting too fat and lazy; it'll do him good to have a job of organization thrown suddenly onto his lap . . ."

Williams enjoyed himself; things had been altogether too quiet for his taste. And then, with the ship quiet and deserted, Grimes, with Sonya and Clarisse and Mayhew, and with a full dozen of assorted scientists, boarded one of the pinnaces, in which the necessary materials had already been stowed.

It was just before sunset when they landed on the smooth, windswept plateau that was the summit of the mountain. A thin, icy wind swept into the little cabin as the door opened. One by one, Grimes in the lead, the members of the party clambered down on to the bare, barren rock, the last ones to emerge handing down the equipment before making their own exits. There was an easel, as before, a floodlight, pots of paint, brushes. There were cameras, still and cinematographic, one of which would transmit a television picture to receivers on the plain below the mountain. There were sound recorders.

Sileptly, slowly, Mayhew and his wife walked to the center of the plateau, accompanied by Grimes and Sonya, carrying what she would be using. Grimes set up the easel, with its stretched black canvas, and the powerful floodlight. Sonya placed the painting materials at its foot. Mayhew, his thin face pale and anxious, lifted the heavy cloak from

Clarisse's shoulders. She stood there as she had stood before, naked save for the brief, rough kilt of animal hide, her arms crossed over her full breasts for warmth rather than from modesty. She looked, thought Grimes (again) as her remote ancestresses on this very world must have looked, was about to practice the magic that they had practiced. Mayhew had produced from a pocket a little bottle and a tiny glass—the psychedelic drug. He filled the glass, held it out to her. "Drink this, my dear," he ordered gently.

She took it from him, drained it, threw it down. It shattered with a crystalline crash, surprisingly loud in spite of the wind. "Your bare feet . . ." muttered Mayhew. He squatted down, carefully picking up the glittering fragments. She did not appear to see what he was doing, stood like a statue when he, on his feet again, laid his free hand on her bare shoulder in an attempted gesture of reassurance and . . . farewell?

He whispered to Grimes, his voice taut with strain and worry, "I can't get through to her. Somebody, something's got hold of her . . ."

The three of them walked back to where the scientists were standing by the pinnacle, their recording apparatus set up and ready. And suddenly the sun was gone, and there was only the glare of the floodlight, in which Clarisse was standing. Overhead was the almost empty black sky with its sparse scatter of dim stars, and low to the east was the arc of misty luminescence that was the slowly rising Galactic Lens. The wind could have been blowing straight from intergalactic space.

Conditions were almost the same as they had been on the previous occasion. Almost. It was the human element that was different. This time those on the mountain top were skeptics and earnest inquirers, not true believers. But the feeling of almost unendurable tension was the same.

Hesitantly, Clarisse stooped to the clutter of materials at her feet. She selected a brush. She dipped it into one of the pots, then straightened. With swift, sure strokes she began to paint.

But it was wrong, Grimes realized. It was all wrong. It was white paint that she had used before; this time she was applying a bright, fluorescent pigment to the canvas. A figure was taking shape—that of a tall, slender man in red tights, with a pointed beard, a mocking smile . . . A man?

But men do not have neat little goatlike horns growing from their heads; neither do they have long, lissome tails ending in a barbed point . . .

A god?

Pan, perhaps.

No, not Pan. Pan never looked like that.

There was a dreadful crack of lightning close at hand, too close at hand, but the flash was not blue white but a dull, unnatural crimson. There was a choking, sulphurous stench. And then *he* was standing there, laughing; amid the roiling clouds of black smoke, laughing.

Grimes heard one of the scientists almost scream, "What the devil . . . ?"

And the devil advanced, still laughing, his very white and very sharp teeth flashing. His surprisingly elegant right hand stretched out to rest on the Commodore's wrist. "You are under arrest," he said. "And I must warn you that anything you say will be taken down and may be used as evidence."

"By what authority?" Grimes heard Sonya cry. "By what . . . ?"

And then there was darkness deeper than that between the universes, and absolute silence.

How long did the journey last? An eternity, or a fraction of a microsecond? It could have been either.

There was light again; not bright, but dim and misty. There was light, and there was solidity underfoot—and there was still the pressure of that restraining hand on his wrist. Grimes looked down—he was reluctant to look up—and saw what looked like a marble pavement. At last he allowed his eyes slowly to elevate. There were the slim, pointed red shoes, inches from his own. There were the slender yet muscular legs in their skintight scarlet hose. There were the elaborately puffed trunks. There was the scarlet, gold-trimmed doublet . . . Suddenly Grimes felt less frightened. This was the Mephistopheles of fancy dress balls, and of opera, rather than a real and living embodiment of unutterable evil. But when he came to the face his assurance began to ebb. There was a reckless handsomeness, but there was power, too much power, power that would be used recklessly and selfishly.

Behind Grimes a very English voice was saying, "We must congratulate our friend on his speedy arrest, Watson."

A deeper voice replied, "Yes, yes, my dear Holmes. But are we sure that we have the right man? After all, to judge by his uniform, he's an officer, and presumably a gentleman . . ."

Mephistopheles laughed sneeringly. "Well I know the villainies of which so-called gentlemen are capable. But I have carried out my part of the bargain and now I shall return to my own place; it's too infernally cold here for comfort."

There was a flash of dull crimson light, the stench of burning sulphur, and he was gone.

"Turn around, fellow, and let us look at you," ordered the first English voice.

Slowly Grimes turned, and what he saw was no surprise to him. There was the tall man with aquiline features, wearing peculiar garments that he knew were a Norfolk jacket, an Inverness cape and a deerstalker cap. There was the short, stout man with the walrus moustache, formally clad, even to black frock coat and gleaming top hat.

Grimes looked at them, and they looked at him.

Then, "Hand it over, sir," ordered the tall man. "Hand it over, and I shall prefer no charges."

"Hand what over?" asked Grimes, bewildered.

"My pipe, of course."

Silently the Commodore drew the leather case from his pocket, placed it in the outstretched hand.

"A remarkable piece of deduction, my dear Holmes," huffed the stout man. "It baffles me how you did it."

"Elementary, my dear Watson. It should be obvious, even to you, that a crime, any crime, cannot take place in the three dimensions of space only. The additional factor, the fourth dimension, time, must always be taken into account. I reasoned that the thief must be somebody living so far in our future that our fictional origin will be forgotten. Then I enlisted the aid of the London branch of the Baker Street Irregulars—those fellows are always absurdly flattered when I condescend to share their dreams! Through them I maintained a round the clock watch on the antique shop that stands where our lodgings used to be. At last it was reported to me that my pipe had been purchased by a red-haired young lady of striking appearance. I learned, too—once again through the invaluable Irregulars—that she was the wife of one Commodore Grimes, of the Rim Worlds Naval Reserve, and would shortly be returning to her hus-



band, who was resident in a city called Port Forlorn, on a planet called Lorn, one of the Rim Worlds. These Rim Worlds are outside our ambit, but I was able to persuade that learned colleague of yours who dabbles in magic to persuade his . . . er . . . colleague, Mephistopheles to place his services at my disposal. Between us we were able to lay a very subtle psychological trap on yet another planet, one with the unlikely name of Kinsolving . . ." Holmes opened the case, took out the pipe, looked at it, sniffed it. His face darkened. "Sir, have you been *smoking* this?"

"Yes," admitted Grimes.

Watson intervened. "It will be a simple matter, Holmes, to sterilize it. Just a jet of steam from a boiling kettle, back in our lodgings . . ."

"Very well, Watson. Let us proceed with the purification rites forthwith."

The two men walked rapidly away, their forms becoming indistinct in the mist. Grimes heard Watson say, "And when I chronicle this case, I shall call it 'The Adventure of the Missing Meerschaum . . .'"

And what about *"The Case of the Kidnapped Commodore"*? wondered Grimes. But before he could start in pursuit of the great detective and his friend another figure had appeared, blocking his way.

He, too, was English, most respectably dressed in the style of the early twentieth century, in black jacket and trousers with a gray waistcoat, a stiff white collar and a black necktie. He was inclined to stoutness, but the ladies of the servants' hall must often have referred to him—but never in his dignified hearing—as "a fine figure of a man."

He raised his bowler hat, and Grimes had sufficient presence of mind to bring the edge of his right hand to the peak of his cap to return the salute. He said, his voice deferential but far from servile, "Welcome aboard, sir." He contrived to enclose the words between quotation marks.

"Er . . . Thank you."

"Perhaps, sir, you will accompany me. I am the only member of my profession in this place, and so it has become my duty—and my pleasure, sir—to welcome new arrivals and to arrange for their accommodation."

"That's very good of you, er . . ."

"Jeeves, sir. At your service. This way, Commodore—I take

it that the braid on your epaulettes still has the same significance as in my time—if you please.”

“Where are you taking me?”

“I took the liberty, sir, of arranging for your accommodation at the Senior Service Club. There are other naval gentlemen in residence. There is Admiral—Lord Hornblower, that is. You must have heard of him. And there is Commander Bond—a very likable young gentleman, but not quite my idea of what a naval officer should be. And . . .” a flicker of distaste crossed Jeeves’s plump face . . . “a certain Lieutenant Commander Queeg, who somehow appointed himself club secretary. He even tried to have Captain Ahab evicted from the premises. How did he put it?” Jeeves’s voice acquired a nasal twang. “‘How can I run a taut ship with that damned whaling skipper stomping around the decks on his peg leg? He’ll be putting that pet whale of his in the swimming bath next. I kid you not.’ But the Admiral—he’s president; although old Captain Noah is the senior member he’s really not much interested in anything—asked my advice. So Commander Bond was ordered to act as a one-man press gang—a form of activity for which he seemed well qualified—and, after Captain Ahab had been pressed into the King’s service he was promptly commissioned by Lord Hornblower. As an officer of the Royal Navy he was really more entitled to Club membership—it’s a very British institution—than Commander Queeg . . .”

“Very ingenious,” commented Grimes.

“I am always happy to oblige, sir.” Jeeves raised his hat to a tall woman who had appeared out of the mist, a striking brunette, barefooted, wearing a long white nightgown. “Good morning, Your Ladyship.”

She ignored him but concentrated on Grimes. She glared at him from slightly mad, dark eyes, and all the time her hands were making peculiar wringing motions. “Ye havena brought any decent soap wi’ ye?” she demanded.

“Soap, madam?”

“Aye, soap, ye lackwitted Sassenach!”

“I’m afraid not. If I’d known that I was coming here . . .”

The woman brushed past him, muttering, “Will *nothing* wash these white hands?”

“I have tried to help her, sir,” said Jeeves, “But I can only do so much. After all, I am not a qualified psychiatrist. But many of the guests in this establishment are more odd

than otherwise." He gestured toward a break in the mist, through which Grimes glimpsed lush greenery, vivid flowers, a veritable jungle. And surely that was the coughing roar of a lion, followed by the shrill chattering of disturbed tropical birds . . . "Lord Greystoke lives there, sir, with his wife, the Lady Jane. They have a house in a big tree, and they consort with *apes* . . . And the people next door, in the next estate—like an English woodland, it is—live in a gamekeeper's cottage. A Mr. Mellors and a Lady Constance Chatterley. You would think that with their mutual love of nature the two couples would be on *very* friendly terms. But no. Lady Chatterley said to me once when I mentioned it—it was when I had invited her and Mr. Mellors to my quarters for a real English afternoon tea, and we were discussing the Greystokes—"The only nature I'm interested in, Jeeves, is *human* nature." Again he raised his hat. "Good morning, Colonel."

"Who was that?" asked Grimes, staring after the figure in the fringed buckskin shirt, with a revolver slung at each hip.

"Colonel William Cody, sir. I feel sorry for the gentleman. You see, he isn't really one of us. As well as living an actual life on the printed page he was also a flesh and blood person. As I understand it, a New York publishing house of his time commissioned a writer to produce a series of stories about the Wild West, and this writer, instead of creating a character, used one who was already in existence in the flesh and blood world, calling him Buffalo Bill. And this, you will understand, makes him, insofar as *we* are concerned, illegitimate. But he is not the only one. There are the Greek ladies and gentlemen—Helen, and Cassandra, and Odysseus, and Achilles, and Oedipus . . . And others. And, of course, there is the Prince, although His Highness claims that he was cribbed from an earlier work of fiction and not from what the flesh and blood people call real life."

"So I'm not real?" demanded Grimes.

"But you are, sir, otherwise you could never have come here. You are, like the rest of us, a creation, a product of the imagination of some gifted writer." He stopped suddenly, and Grimes stopped with him. "But, sir, are you an *enduring* product?" He walked around the Commodore like a tailor inspecting the fit and cut of a new uniform. "This is indeed unfortunate, sir. Already I detect a hint of insubstantial-

ity . . ." He paused, turned to face a newcomer, bowed. "Good morning, Your Highness."

The tall, thin, pale man in formfitting black, with the white lace at throat and cuffs, did not reply to the salutation. Instead he said in a sonorous voice, "To be or not to be, that is the question . . ."

"Too right," agreed Grimes.

The Prince of Denmark looked down at the age-mottled skull that he held in his right hand. "Alas, poor Yorick, I knew him well . . ." He stared at the Commadore. "But you I do not know." He turned on his heel, strode away.

"Good night, sweet Prince," said Grimes bitterly.

"Do not mind His Highness," said Jeeves. "He has a sardonic sense of humor."

"Maybe he has. But you must have had other . . . characters here who were not, as you put it, enduring products. What happened to them?"

"They . . . faded, sir. There was a young man dressed up in old woman's clothing who called himself 'Charley's Aunt.' He lasted quite a few years, Earth Time, but he's vanished now. And there have been many gentlemen like yourself, spacemen. None of them lasted long."

"But what happens to them? To *us*?"

"I cannot say, sir. When the last book in which you appeared has crumbled into dust, when your last reader has gone to wherever the flesh and blood people go, what then?"

"There must be *some* way," muttered Grimes. Then, aloud "All right. I'm scared. I admit it. But my own case is different. All you others came here, I suppose, after the death of your authors. You're immortality—perhaps—for the men who created you. But I was brought here before my time. I was the victim of a plot cooked up—and what more unlikely fellow conspirators could there ever be!—by Sherlock Holmes and Dr. Faustus. And Mephistopheles."

Jeeves laughed quietly. "I knew that Mr. Holmes had lost his pipe. I offered to assist him in its recovery; but he, of course, was too proud to accept my humble services. He always likes to do things his own way. And you, sir, I take it, are the innocent victim."

"You can say that again. I was shanghaied away from my own universe to this . . . limbo . . ."

"We prefer, sir, to call it the Hall of Fame."

"And I'm not the only victim. Back there I've a wife, and a ship . . . I must get back to them."

"I appreciate your anxiety, sir, and I admit that there could be need for haste. Time is measured differently here than elsewhere, sir, and already you are becoming quite diaphanous . . ."

Grimes held out his hand, looked at it. He could see the marble flooring through skin and flesh and blood and bone.

"Hurry, sir," urged Jeeves.

They hurried. Nonetheless, Grimes retained a confused memory of their nightmarish gallop. Men and women stopped to stare at them; and some of them Grimes recognized; and some were hauntingly familiar; and a very few struck no chords in his memory whatsoever. There were occasional rifts in the eddying mists to afford fleeting glimpses of buildings, and, like the clothing of the people, the architecture was of all historical periods. Turreted Camelot, its towers aflutter with gay pennons, they sped by; and beyond its walls was a barren and dusty plain whereon a solitary knight, a scarecrow figure astride a skeletal horse, tilted at windmills. Then there was Sherwood Forest, where the outlaws in Lincoln green paused in their archery practice to cheer on the two runners.

And for a while there was the shambling monstrosity that lurched along beside them, keeping pace, like a large, unlovely dog trying to make friends. Grimes glanced at this giant, who seemed to have been put together from not quite matching parts pilfered from the graveyard, then looked hastily away, sickened by the sight of him and by the charnel stench that emanated from the crudely humanoid form. Then there was the other monster, the handsome man in nineteenth century dress finery who hovered above them on black bat's wings. Jeeves, who did not suffer from lack of wind, muttered something uncomplimentary about Eastern European aristocracy.

At last there loomed before them the house that was their destination. All high gables it was, and oak beams, with narrow, diamond-paned windows. Set high on the stout, iron-bound door was the black, iron knocker—metal cast in the form of an inverted crucifix. Jeeves reached for it, rapped smartly.

Slowly the door creaked open. An old, graybearded man

peered out at them suspiciously. He was dressed in a rusty black robe upon which cabalistic symbols gleamed with a dull luster and a tall, conical, black hat. His blue eyes were so faded as to be almost white.

He demanded querulously, "Who disturbs my rest?"

"It is I, Jeeves, Herr Doktor . . ."

"And this other? This . . . phantasm?"

"The innocent victim, Dr. Faustus, of the peculiar machinations set in motion by yourself and Mr. Holmes."

"What is done cannot be undone." He glared at Grimes, through Grimes. "And do *you* cry, 'Oh, Lord, put back Thy Universe, and give me back my yesterday?'"

"I have done so," whispered Grimes. "As who has not?"

"I cannot help you." The door was starting to close.

But Jeeves had inserted a stout, highly polished shoe into the narrowing opening. "Do not forget that *I* have helped you, Dr. Faustus. Have I not sent patients to you?" He added nastily, "Although Achilles still limps, and Oedipus still chases after older women . . ."

"My name is Faustus, not Freud," grumbled the old man.

"Furthermore," continued Jeeves, "both you and your partner rely upon me for the supply of the luxuries that were unavailable in your own day and age."

The door opened abruptly. "Come in!" snarled the old doctor.

Inside it was dark, the only light coming from a brazier over which a cauldron bubbled. The room was a large one, but it was so cluttered with a fantastic miscellany of objects that it was hard to move without fouling something. Grimes ducked hastily to avoid striking his head on a stuffed crocodile that hung from the low ceiling, then almost tripped over a beautiful—but woefully inaccurate—celestial globe that stood on the stone floor. He would have tripped had his body been solid, but his shadowy leg passed through the obstacle with no more than the faintest hint of resistance.

Grumbling, the old man shuffled to a bench littered with the apparatus of alchemy. "Chalk . . ." he muttered, "for the pentagram . . . Where did I put it? And the sulphur candles . . ."

"There's no time for that, Doctor. Can't you see? This gentlemen needs help urgently."

"But *He* will not like it if I do not observe protocol."

"*He* won't like it if he has to go thirsty from now on."

"Very well, very well. But I warn you—*He* will be bad tempered."

Dr. Faustus tottered to a low table upon which stood a large, stuffed owl. He lifted the bird, which was hollow, revealing a jarringly anachronistic telephone. He handed the owl to Jeeves, who regarded it with some distaste, then took the handset from its rest, punched a number.

"Yes," he croaked into the instrument. "At once." There was a pause. "Yes, I know that you always insist that the proper procedure be followed, but Mr. Jeeves says that this is urgent." There was another pause. "You'd better come, unless you want to do without your brandy and cigars . . ."

This time there was no thunder, no crimson lightning, no clouds of black, sulphurous smoke. But Mephistopheles was standing there, his arms folded over his muscular chest, scowling down at Grimes. "Yes?" he demanded shortly. "Yes, my man?"

The Commodore, his voice a barely audible whisper, said, "Take me back to where I belong."

The Commodore stepped silently forward, peered over the writer's shoulder. He read, *He was standing in a ship's cabin. The carpeted deck swayed and lurched under his feet . . .* Then the carpeted deck lurched really heavily. Grimes put out a hand, to the back of the other man's chair, to steady himself.

The writer started violently, exclaimed, "What the hell!" He twisted in his seat, stared at Grimes. His pipe fell from his mouth, clattered to the deck. "No . . ." he said slowly. "No. It can't be. Go away."

"I wish that I could," Grimes told him.

"Then why the hell don't you?"

"You, sir, should know the answer to that question," said Grimes, reasonably enough. He looked curiously at the other man, his . . . creator? His . . . parent? But there was no physical resemblance to himself. He, Grimes, was short and stocky, and his ears were his most prominent facial feature. The writer was tall, with normal enough ears, but too much nose.

"You, sir, should know the answer to that question," repeated Grimes.

"I'm sorry, Commodore, but I don't. Not yet, anyhow."

Then, in a tone of forced cheerfulness, "But this is only a silly dream. It must be."

"It's not, Captain." The man's gold-braided epaulettes and the uniform cap, with the scrambled egg on its peak, hanging on a hook just inside the curtained door made this a safe enough guess. "It's not, Captain. Pinch yourself."

"Damn it! That hurt."

"Good. Do you mind if I sit down?" Carefully, Grimes eased himself on to the settee that ran along one bulkhead of the day cabin. He feared at first that he was going to sink through the cushion, but it had substance (or he had substance) and supported him, although only just. He shut his eyes for a moment, trying to dispel the faintness that was creeping over him. It was the result of shock, he realized, of shock and of disappointment. He had expected to find himself aboard his own ship, the old, familiar, tried and trusted *Faraway Quest*, to be welcomed back by his wife. But where was he now? *When* was he? On Earth, the mother world of humankind? Aboard some sort of surface vessel?

The writer answered the unspoken questions. He said, "I'll put you in the picture, Commodore. You're aboard the good ship *Kantara*, which same plies between Melbourne and the port of Macquarie, on the wild west coast of Tasmania. We load pyritic ore in Macquarie for Melbourne, and make the return trip (as we are doing now) in ballast. I doubt very much if you have anything like this trade in your day and age, sir. Macquarie's one of those places that you can't get into when you're outside, and that you can't get out of when you're inside. To begin with, the tides are absolutely unpredictable, and it's safe to work the entrance—it's called Hell's Gates, by the way—only at slack water. If you tried to come in against a seven knot ebb you'd be in trouble! And the Inner Bar and the Outer Bar are always silting up, and with strong north westerlies—which we've been having—Outer Bar breaks badly. I've been riding out a howling westerly gale, keeping well to seaward, as I just don't like being caught on a lee shore in a small, underpowered and underballasted ship. But the wind's backed to the south'ard and is moderating, and the glass is rising, and all the weather reports and forecasts look good. So I'm standing in from my last observed position—P.M. star sights—until I'm just inside the extreme range of Cape Sorell light, and then I'll



just stand off and on until daylight, keeping within easy reach of the port. Come the dawn, I'll have a natter with the harbor master on the radio telephone, and as soon as he's able to convince me that conditions are favorable I'll rush in."

"Why bother with the extreme range of the light?" asked Grimes, becoming interested in spite of all his troubles. "You have radar, don't you?"

"I do. I have radar and echo sounder. But my radar gets old and tired after only a few hours' operation, and my echo sounder's on the blink. I've nothing against electronic gadgetry *as long as it can be relied upon*. At the moment, mine can't be." The writer laughed. "But this is crazy. To sit here discussing navigation with a navigator from the distant future! I hope that none of my officers comes in to find me carrying on a conversation with myself!"

"I'm real, Captain. And I'm here. And I think that you should do something about getting me back to where I belong."

"What can I do, Commodore? People have said, more than once, that my stories just *happen*. And that's true, you know. Furthermore, I've always given *you* a free hand. Time and time again I've had to make plot changes because you've insisted on going your own way."

"So you can't help me . . ."

"I wish that I could. Believe me, I wish that I could. Do you think that I want to be haunted by you for the rest of my life?"

"There could be a way . . ." whispered Grimes. Yes, he thought, *there could be a way*. Life in that Hall of Fame would not be at all bad as long as he—and Sonya—were assured of the same degree of permanence as the others: Oedipus Rex, Hamlet, Sherlock Holmes, James Bond . . . He said, "I shan't mind a bit going back to that peculiar Elysium you cooked up as long as my status there is better than that of an ephemeral gate crasher. And, of course, I'd like Sonya with me."

"And just how can I arrange that for you, Commodore?"

"Easily, Captain. All you have to do is write a best seller, a series of best sellers."

The other man grinned. "It's a pity you can't meet my wife." He gestured toward a peculiarly two dimensional photograph in a frame over the desk. The auburn-haired

woman who looked out at them reminded Grimes of Sonya. "That's what she's always telling me."

There was a sharp buzz from the telephone on the desk. The writer picked up the handset. "Master here."

"Third Officer here, sir," Grimes heard faintly. "I've just picked up Cape Sorell light, at extreme range, right ahead . . ."

"Good, Mr. Tallent. Turn her on to the reciprocal course. Yes, keep her on half speed. I'll be right up."

Grimes followed the shipmaster out of the day cabin, up the narrow companionway to the chartroom, out of the glass-enclosed wheelhouse, then out through a sliding door to the wing of the bridge. The night was clear, and the stars (would he ever see them again as more than lights in the sky?) were bright. Astern was the winking, group-flashing light, an intermittent spark on the far horizon. And then the light itself was gone, only a flash recurring at regular intervals marking its position as the lantern dipped below the planet's curvature.

The captain grunted his satisfaction, then turned to stare forward. There was still quite a sea running, the wave crests faintly phosphorescent in the darkness; there was still a stiff breeze, broad on the port bow, but there was no weight to it. The ship was lifting easily to the swell, the motion not at all uncomfortable. The captain grunted again, went back to the chartroom. Grimes looked over his shoulder as he bent over the chart, noted the range circle with Cape Sorell as its center, the dot on it in the middle of its own tiny, penciled circle with the time—2235—along it, and another, cryptic notation,  $\Delta$  33.5. On the chart, to one side, was a message pad. *Final Gale Warning*, it was headed. "Wind and sea moderating in all areas," read Grimes. "All pressures rising."

The shipmaster was busy now with parallel rulers, pencil and dividers. From the observed position he laid off a course—270° True. With the dividers he stepped off a distance, marked it with a cross and wrote alongside it "0200?" Grimes realized that the officer of the watch had come into the chartroom. He could see the young man, but the young man, it seemed, could not see him.

"Mr. Tallent," said the shipmaster, "we'll stand out to this position, then bring her around to 090 True. All being well, we shall be within comfortable VHF range at daylight,

and with any luck at all the Bar will have stopped breaking and we shall have slack water. I'll not write up my night orders yet; I'll see the second officer at midnight before I turn in . . ."

"We should get in tomorrow all right, sir," said the officer.

"Don't be so bloody sure. You can never tell with this bloody place!"

"Good night, sir."

"Good night, Mr. Tallent."

Back in the day cabin, Grimes said, "You can see, Captain, that I have no real existence *here* and *now*. You *must* try to make me real *somewhere*."

"Or *somewhen*."

"Or *somewhen*."

"More easily said than done, Commodore. Especially in the existing circumstances. At the moment of writing *I* am master of this little rustbucket. Master under God, as Lloyd's puts it. This ship is my responsibility—and *you* should be able to appreciate that. This evening I was writing just as relaxation, one hand on the keyboard, the other ready to pick up the telephone . . ."

Grimes said, "You take yourself too bloody seriously. This is only a small ship with a small crew on an unimportant trade."

"Nonetheless," the shipmaster told him, "this is *my* ship. And the crew is *my* crew. The trade? That's the Company's worry; but, as Master, it's up to me to see that the ship shows a profit."

"And I'm your responsibility too," Grimes pointed out.

"Are you? As I've already said, Commodore, you've proven yourself able to go your own sweet way in any story that I've written. But if I *am* responsible just bear in mind that I could kill you off as easily as I could swat a fly. More easily. How do you want it? Act of God, the King's enemies, or pirates? Nuclear blast—or a knife between the ribs?"

"You're joking, *surely*."

"Am I? Has it never occurred to you, Commodore, that a writer gets rather tired of his own pet characters? Sir Arthur Conan Doyle killed off Sherlock Holmes, but had to drag him back to life to please his public. Ian Fleming was becoming more than somewhat browned off with James Bond when he, himself, kicked the bucket . . ."

Grimes looked toward the photograph over the desk. "But you like Sonya," he said.

"I do. She's too good for you."

"Be that as it may. She's part of my world, my time . . ."

"So?"

"Well, I thought . . ."

The telephone buzzed. The shipmaster picked up the handset. "Yes?"

"The wind's freshening, sir, and it's veered to west."

"Put her back on full speed, Mr. Tallent." The captain got up from his chair, went to the aneroid barometer mounted on the bulkhead. He tapped it. The needle jerked in a counterclockwise direction. "Just what I need," he said. "A bloody secondary."

"What does that mean, Captain?"

"It means, Commodore, that those *Final Gale Warnings* aren't worth the paper that Sparks typed them on. Very often, too often, in these waters the secondary depression is more vicious than the so-called primary."

"What can you do?"

"Stand out. Make offing. Get the hell off this bloody lee shore."

Again the telephone buzzed. "Master here."

"Sir, we've lifted Cape Sorell again . . ."

"Tell the engineers to give her all they've got. I'll be right up."

The ship was lurching, was rolling heavily as she fell away from the wind. She was pounding as her fore part lifted and then slammed back down into the trough. Her screw was racing each time that her stern came clear of the water, and as the propeller lost purchase, so did the rudder. "Sir," complained the helmsman, "the wheel's hard over, but she's not coming back . . ."

"Keep it hard over until she answers," ordered the Master. He was looking into the radar screen. It was not a very good picture. There was spoking, and there was too much clutter. But there, right astern, was the faint outline of the rocky coast, a ragged luminosity. And there were the range circles—and slowly, slowly, the coastline was drifting from the 24 mile to the 20 mile ring. Even Grimes, peering over the other man's shoulder, could appreciate what was happening.

"Mr. Tallent!"

"Sir?"

"Call the Chief Officer. Tell him to flood the afterhold."

"Flood the afterhold, sir?"

"You heard me. We have to get the arse down somehow, to give the screw and the rudder some sort of grip on the water."

"Very good, sir."

"She's logging three knots," whispered the Master. "But she's making one knot—*astern*. And that coast is nothing but rocks . . ."

"And flooding the hold will help?" asked Grimes.

"It'd better. It's all I can do."

They went back out to the wing of the bridge, struggling to retain their balance as the wind hit them. Cape Sorell light was brightly visible again, right astern, and even to the naked eye it had lifted well clear of the sea horizon. A shadowy figure joined them there—the Chief Officer, decided Grimes.

"I've got two fire hoses running into the hold, sir. What depth of water do you want?"

"I want 100 tons. Go below and work it out roughly."

"What if the ceiling lifts?"

"Let it lift. Put in your hundred tons."

"Very good, sir."

Another officer came onto the bridge—big, burly, bearded. This must be, realized Grimes, the midnight change of watch. "Keep her as she's going, sir?" he asked.

"Yes. Keep her as she's going, Mr. Mackenzie. She'll be steering better once we get some weight in aft, and racing less. But you might tell the engineers to put on the second steering motor . . ."

"Will do, sir."

The shipmaster made his way back into the wheelhouse, staggering a little as the vessel lurched in the heavy swell. He went to the radar unit, looked down into the screen with Grimes peering over his shoulder. Right astern, the ragged outline of Cape Sorell was touching the twenty mile ring. Slowly the range decreased—slowly, but inexorably.

The Chief Officer was back. "About two foot six should do it, sir."

"Make it that . . ."

Then, gradually, the range was opening again. The range

was opening, and the frequent heavy vibrations caused by the racing screw were becoming less. The wind was still shrieking in from the westward, whipping the crests off the seas, splattering them against the wheelhouse windows in shrapnel bursts of spray, but the ship was steering again, keeping her nose into it, clawing away from the rocks that had claimed, over the years, too many victims.

Grimes followed the Master down to the afterdeck, stood with him as he looked down a trunkway into the flooded hold. Swirling in the filthy water were the timbers of the hold ceiling, crashing against the bulkheads fore and aft, splintering themselves against frames and brackets and the hold ladders, self-destroying battering rams driven by the force of the ship's pitching and rolling. There would be damage, even Grimes could see that. There would be damage—and, inevitably, the writing of reports with carbon copies every which way.

Grimes knew this, and he should have had more sense than to attempt to bring up the subject again of his own, private worries.

He said, "This hold flooding seems to have worked . . ."

"Yes."

"Then perhaps, Captain, you could spare the time to discuss the question of returning me to my own place and period . . ."

". . . off!" snarled the shipmaster. "I've more important things on my plate than your troubles. . . . Off!"

The screaming wind took hold of Grimes, whirling him away into the darkness. But, before he was gone, he heard the Chief Officer ask his captain, "Who was that sir? I thought I saw somebody standing there with you, a stranger in an odd-looking uniform . . ."

"Just a figment of the imagination, Mr. Briggs. Just a figment of the imagination."

He was standing in his own day cabin, aboard *Faraway Quest*. He was staring at Sonya, and she, her face white under the auburn hair, was staring at him.

"John! You're back!"

"Yes."

"I've been holding the ship, here on Kinsolving, but our lords and masters have been putting the pressure on us to return . . ."

"It wouldn't have mattered," Grimes told her.

"Why not?"

"Because wherever *you* are, that's where I belong."

He was sitting in his day cabin, trying to relax over a stiff drink. He had brought his ship into port, scurrying in during a lull between two depressions, pumping out after ballast to compensate for the weight of water in the flooded hold, clearing the Bar without touching. He was overtired and knew that sleep was out of the question. But there was nothing for him to do; his Chief Officer was capably overseeing the pumping out of the flooded compartment and would, as soon as possible, put the necessary repairs in hand.

He thought, *I might as well finish that bloody story.*

He inserted paper into his typewriter, refueled and lit his pipe, began to write. As the final words shaped themselves on the white sheet he looked up at the photograph of the red-haired woman over his desk. *Because wherever you are, that's where I belong . . .*

"And I hope you're satisfied, you cantankerous old bastard," he muttered.

"And it all actually happened . . ." murmured Admiral Kravinsky, indicating the thick report that lay on his desk.

"I . . . I suppose so . . ." said Grimes uncertainly.

"You should know, man. You were there."

"But *where* was *there*?"

"Don't go all metaphysical on me, Grimes." The Admiral selected a gnarled cheroot from the box before him, lit it. In self-defense the Commodore filled and ignited a battered briar pipe. He regretted, he realized, having lost that meerschaum during his last adventure.

Kravinsky regarded the swirling clouds of acrid blue smoke thoughtfully. He said at last, "It was rummy, all the same. Very rummy."

"You're telling *me*," c/surred Grimes.

"I think that we shall be leaving Kinsolving severely alone for quite a while. I don't like this business about our just being a figment of the imagination or an imagination of the figment or whatever . . ."

"You don't like it . . ." muttered Grimes.

"All right, all right, my heart fair bleeds for you. Satisfied? And now, Admiral, I have a job for you that should be right up your alley."

"Admiral? Have I been promoted, sir?"

"That'd be the sunny Friday! But, Grimes, I seem to remember that you're an honorary admiral in the Tharn Navy, and that same Navy consists of seagoing surface vessels. The rank, meaningless though it is, should be useful to you when we send you to Aquarius."

"The rank's not meaningless, sir," protested Grimes.

"So much the better, then. On your way, Admiral. Weigh anchor, splice the main brace, heave the lead or whatever it is you seafaring types do when you get under way."

"It should be interesting," said Grimes.

"With you around to complicate matters, it's bound to be."



## THE SISTER SHIPS

CAPTAIN JOHN GRIMES stood impassively in the port wing of his bridge as his ship, the round-the-world tramp *Sonya Winneck*, slid gently in toward her berth. But although his stocky body was immobile his brain was active. He was gauging speed, distances, the effect of the tide. His engines were stopped, but the vessel still seemed to be carrying too much way. He was stemming the ebb, but, according to the Port Directions there was sometimes—not always—an eddy, a counter current along this line of wharfage. In any case, it would be a tight fit. Ahead of him was *Iron Baron*, one of the steel trade ships: a huge, beamy brute with gigantic deck cranes almost capable of lifting her by her own bootstraps. In the berth astern was the Lone Star Line's *Orionic*, with even more beam to her than the *Baron*.

"Port!" ordered Grimes. "Hard over!"

"Hard a port, sir!" replied the quartermaster.

*Sonya Winneck* was accosting the wharf at a fairly steep angle now, her stem aimed at a bollard just abaft *Iron Baron's* stern. Grimes lifted his mouth whistle to his lips, blew one short, sharp blast. From the fo'c'sle head came the rattle of chain cable as the starboard anchor was let go, then one stroke of the bell to signal that the first shackle was in the pipe.

Grimes looked aft. *Sonya Winneck's* quarter was now clear of *Orionic's* bows. "Midships! Slow astern!"

He heard the replies of the man at the wheel and the Third Officer. He felt the vibration as the reversed screw bit into the water. But would slow astern be enough? He was about to order half astern, then realized that this was what he was getting, if not more. The transverse thrust of the screw threw *Sonya Winneck's* stern to port even as her headway was killed. Already a heaving line was ashore forward, and snaking after it the first of the mooring lines. Aft, the Second Mate was ready to get his first line ashore.

"Stop her," ordered Grimes. "That will do the wheel, thank you."

On fo'c'sle head and poop the self-tensioning winches were

whining. Grimes, looking down from the bridge wing to the marker flag on the wharf, saw that he was exactly in position. He made the traditional "arms crossed above the head" gesture—*Make her fast as she is*—to the Chief Officer forward, the Second Officer aft. Then he walked slowly into the wheelhouse. The Third Officer was still standing by the engine control pedestal.

"Finished with engines, Mr. Denham," said Grimes coldly.

"Finished with engines, sir." The young man put the lever to that position. There was a jangling of bells drifting up from below.

"Mr. Denham . . ."

"Sir?" The officer's voice was an almost inaudible squeak. He looked frightened, and, thought Grimes, well he might be.

"Mr. Denham, I am well aware that in your opinion I'm an outsider who should never have been appointed to command of this vessel. I am well aware, too, that in your opinion, at least, your local knowledge far surpasses mine. Even so, I shall be obliged if you will carry out my orders, although you will still have the right, the obligation, in fact, to query them—but not when I'm in the middle of berthing the bloody ship!" Grimes simmered down. "For your information, Mr. Denham, even I realized that slow astern would not be sufficient. I was about to order more stern power, then saw that you had taken matters into your own possibly capable but definitely unqualified hands."

"But, sir . . ."

Grimes's prominent ears had reddened.

"There are no 'buts.'"

"But, sir, I *tried* to put her to slow astern. The lever jerked out of my hand to full."

"Thank you, Mr. Denham," said Grimes at last. He knew that the young man was not lying. "You'd better see the Engineer, or the Electrician, and get those controls fixed. The next time they might do the wrong thing, instead of the right one."

He went through the chartroom and then down to his quarters. Sonya, who had watched the berthing from the lower bridge, was there waiting for him. She got up from her chair as he entered the day cabin and stood there, tall and slim and graceful. Her right hand snapped up to the widow's peak of her shining auburn hair.

She said, "I salute you, Cap'n. A masterly piece of ship handling."

"Mphm," grunted Grimes.

"But, John, it was like something out of one of your own books." She went to the case on the bulkhead in which were both privately owned volumes and those considered by the Winneck Line to be fit and proper reading for its masters. From the Company's shelf she lifted *The Inter-Island Steamer Express*, by John Grimes. She read aloud, ". . . These captains, maintaining their timetables and berthing and unberthing their big, seagoing passenger ferries in the most appalling weather conditions, were, without doubt, among the world's finest ship handlers . . ."

"The weather conditions this morning aren't appalling," said Grimes. "In any case, that was on Earth. This is Aquarius."

Aquarius, as its name implies, is a watery world.

It lies in toward the center from the Rim Worlds, fifty or so light-years to the galactic east of the Shakespearean Sector. It is Earth-type insofar as gravitation, atmosphere and climate are concerned, but geographically is dissimilar to the "home planet." There are no great land masses; there are only chains of islands: some large, some small, some no more than fly specks on even a medium scale chart. In this respect it is like Mellise, one of the planets of the Eastern Circuit. Unlike Mellise, it possesses no indigenous intelligent life. Men colonized it during the Second Expansion—and, as was the case with most Second Expansion colonizations, it was discovery and settlement by chance rather than by design. Time and time again it happened, that disastrous, often tragic sequence of events. The magnetic storm, the gauss-jammer thrown light millennia off course, her pile dead and the hungry emergency diesels gulping precious hydrocarbons to feed power to the Ehrenhaft generators, the long plunge into and through the Unknown; the desperate search for a world, any world, that would sustain human life . . .

*Lode Messenger* stumbled upon Aquarius and made a safe landing in the vicinity of the North Magnetic Pole. Like all the later ships of her period she carried a stock of fertilized ova, human and animal, a wide variety of plant seeds and an extensive technical library. (Even when the gaussjammers were on regular runs, as *Lode Messenger* had been, there

was always the possibility that their people would finish up as founders of a new colony.) When the planet was re-discovered by Commodore Shakespeare, during his voyage of exploration out toward the Rim, the settlement was already well established. With the Third Expansion it accepted its quota of immigrants, but insisted that all newcomers work for a probationary period in the merchant or fishing fleets before, if they so wished, taking up employment ashore. Somebody once said that if you wanted to emigrate to Aquarius you had to hold at least an "Able-bodied seaman's" papers. This is not quite true, but it is not far from the truth. It has also been said that Aquarians have an inborn dislike and distrust of spaceships but love seagoing ships. This is true.

Grimes, although not an immigrant, was a seaman of sorts. He was on the planet by invitation, having been asked by its rulers—the Havenmaster and the Master Wardens—to write a history of the colony. For that he was well qualified, being acknowledged as the leading maritime historian, specializing in Terran marine history, in the Rim Worlds. His books: *The Inter-Island Steamer Express*, *The Flag Of The Southern Cross*, *The Western Ocean Greyhounds*, *Times of Transition*—had sold especially well on Aquarius, although in the worlds of the Rim Confederacy they were to be found mainly only in libraries, and in very few libraries at that.

And Commodore Grimes, Rim Worlds Naval Reserve, Master Astronaut, was more than just a writer about the sea. He held the rank of admiral—honorary, but salt water admiral nonetheless—in the Ausiphalian Navy, on Tharn. Captain Thornton, the Havenmaster, had said, "Legally speaking, that commission of yours entitles you to a Certificate of Competency as a Master Mariner. Then you can sail in command of one of our ships, to get the real feel of life at sea."

"I'm not altogether happy about it, Tom," Grimes had objected, not too strongly.

"I'm the boss here," Thornton assured him. "And, in any case, I'm not turning you loose until you've been through crash courses in navigation, seamanship, meteorology, cargo stowage and stability."

"I'm tempted . . ." Grimes had admitted.

"Tempted?" scoffed Sonya. "He's just dying to strut his

bridge like the ancient mariners he's always writing about. His only regret will be that you Aquarians didn't re-create the days of sail while you were about it."

"Now and again I regret it myself," admitted the Havenmaster. "Fore and aft rig, a diesel auxiliary, electrical deck machinery—there'd be something quite fast enough for some of our trades and economical to boot. But I'm well known as an enemy of progress—progress for its own sake, that is."

"A man after my own heart," said Grimes.

"You're just a pair of reactionaries," Sonya had told them.

*I suppose I am a reactionary,* Grimes had thought. But he enjoyed this world. It was efficiently run, but it was always recognized that there are things more important than efficiency. There was automation up to a certain point, but up to that certain point only. (But the Havenmaster had admitted that he was fighting a rearguard action to try to keep control of the ships in the hands of the seamen officers . . .) There was a love of and a respect for the sea. It was understandable. From the first beginnings of the colony these people had grown up on a watery world, and the books in their technical library most in demand had been those on shipbuilding, seamanship and navigation. Aquarius was poor in radioactives but rich in mineral oil, so the physicists had never been able, as they have on so many worlds, to take charge. The steam engine and the diesel engine were still the prime movers, even in the air, where the big passenger-carrying airships did the work that on other planets is performed by jet planes and rockets.

The surface ships were, by modern standards, archaic. Very few of them ran to bow thrusters—and those only ferries, cargo and passenger, to whom the strict adherence to a timetable was of paramount importance, whose masters could not afford to make a leisurely job of backing into a roll-on-roll-off berth and therefore required the additional maneuvering aid. There was some containerization, but it was not carried to extremes, it being recognized that the personnel of the cargo carriers were entitled to leisure time in port. Self-tensioning winches and, for cargo handling, cranes rather than derricks cut down the number of hands required on deck, and engine rooms were almost fully auto-

mated, with bridge control for arrival and departure maneuvers.

There were electronic navigational aids aplenty—radar, echometer, loran, shoran, an inertial system, position fixing by artificial satellite—but these the Havenmaster frowned upon, as did most of the senior shipmasters. He quoted from Grimes's own book, *Times Of Transition*, "The electronic wizards of the day, who were not seamen, failed to realize that a competent navigator, armed only with sextant, chronometer and ephemeris, together with a reasonably accurate log, can always fix the position of his ship with reasonable accuracy provided that there is an occasional break in the clouds for an identifiable celestial body to shine through. Such a navigator is never at the mercy of a single fuse . . ."

"And that, John, is what I'm trying to avoid," said Thornton. "Unless we're careful our ships will be officered by mere button pushers, incapable of running a series of P/Ls. Unluckily, not all the Master Wardens think as I do. Too many of them are engineers, and businessmen—and in my experience such people have far less sales resistance than we simple sailors."

"And what pups have they been sold?" asked Grimes.

"One that's a real bitch from my viewpoint, and probably from yours. You've heard of Elektra?"

"Yes," broke in Sonya. "Carinthian Sector. Third Expansion colonization." She grinned a little unkindly. "It's a planet where the minimum qualification for immigration is a doctorate in one of the sciences, preferably physics. But they have to let in occasional chemists, biologists and the like to keep the dump habitable."

"And they have quite a few, now, with degrees in salesmanship," went on the Havenmaster. "One of them was here a few years back."

"And he sold you this female pup," said Grimes.

"He did that. The Purcell Navigator. It's named, I suppose, after its inventor. It's a sealed box, with the gods know what sort of mess of memory fields and the like inside it. It's hooked up to all the ship's electronic navigational gear: gyro compass, radar, echometer, loran, shoran . . . Just name a pie and it's got a finger in it. Or a tentacle. It knows just where the ship is at any given second. If you ask it nicely it might condescend to tell you."

"You don't like it," said Grimes.

"I don't like it. To begin with, some of the shipowners—and this is a private enterprise planet, remember—feel that now the bridge can be automated to the same extent as the engine room, with just one man, the Master, in charge, snoring his head off on the chartroom settee and being awakened by an alarm bell just in time to rub the sleep out of his eyes and take his ship into port. But that's not the worst of it. Now the Institute of Marine Engineers is saying, 'If navigation is only a matter of pushing buttons, we're at least as well qualified as deck officers.'"

"I've heard that often enough," said Grimes. "Even in space."

"Does anybody know how these Purcell Navigators work?" asked Sonya.

"No. One of the terms of sale is that they must be installed by technicians from the world of manufacture, Elektra. Another is that they must not, repeat not, be tampered with in any way. As a matter of fact the Chief Electrician of the Carrington Yard did try to find out what made one tick. He was lucky to lose only a hand."

"It seems," said Grimes, "that I came here just in time."

"What do you mean, John?"

"Well, I shall be able to enjoy the last of the old days, the good old days, on Aquarius, and I shall have the material for a few more chapters to my *Times Of Transition*."

"He likes being morbid," said Sonya. "Almost as much as he likes being reactionary."

"Mphm," grunted Grimes. "Old-fashioned sounds better."

He got up from his chair, walked soundlessly over the carpeted floor to the bookshelves that formed a space divider in the huge, circular room that was called the Haven-master's Lookout. He stared at the rows of books, most of them old (but in recent printings), only a few of them new. And they were *real* books, all of them, not spools of microfilm. There were the standard works on the old arts of the seaman, hopelessly out of date on most worlds, but not (yet) on this one. Brown, Nicholl, Norie, Riesenbergs . . . Lecky . . . Thomas . . . And the chronicles of the ancient explorers and navigators: Hakluyt, Dampier, Cook, Flinders, Bligh . . . Then there were the novels: Conrad (of course), McFee, Monsarrat, Herman Wouk, Forester . . . Grimes's hand went out to Melville's *Moby Dick*, and he remembered that odd Hall of Fame to which he had been whisked from the

mountaintop on Kinsolving, and felt regret that he had not been able to meet Lieutenant Commander Queeg, Admiral Hornblower and Captain Ahab. (Were there any white whales in the Aquarian seas?)

He turned, saw that his wife and Captain Thornton had risen from their own seats, were standing staring out through the huge window that formed the entire outer wall of the Lookout that, in its turn, was the top level of the two thousand foot high Havenmaster's Control Tower. Above it was only the mast from which sprouted antennae, radar scanners, anemometers and the like, that was topped by the powerful, group-flashing Steep Island light.

Grimes walked slowly to join Sonya and his host, gazed out through the clear glass into the darkness. At regular intervals the beam of the light, a sword of misty radiance, swept overhead. Far to the south, a loom of luminescence on the distant sea horizon, was Port Stellar, and to east and west, fainter still, were other hazy luminosities, island cities, island states. Almost directly below was a great passenger liner, from this height no more than a gaudy, glittering insect crawling over the black carpet of the sea.

In spite of the insulation, the soundproofing, the thin, high whine of the wind was evident.

Sonya shivered. "The winds of change are blowing," she whispered.

"A seaman should be able to cope with the wind," said the Havenmaster. Then, to Grimes, "I wonder how you'll cope, John? I've arranged for you to take over *Sonya Winneck* at Port Stellar tomorrow."

"I'll get by," said Grimes.

"He always does," said Sonya. "Somehow."

Grimes fell in love with *Sonya Winneck* from the very start. She was, of course, his first sea command; nonetheless, she made an immediate appeal to the eye, even to the eye of one who, for all his admiral's commission, had very little practical knowledge of oceangoing ships. The lady was a tramp, but the tramp was also a lady.

Five hundred feet long overall, she was, with a seventy-foot beam. Bridge and funnel—the latter scarlet, with a black top and two narrow black bands—were amidships. Her upperworks and deck cranes were white, her hull green with a yellow ribbon. The boot-topping was red.



There is more to a ship than outward appearance, however. And Grimes, himself a shipmaster of long standing, knew this as well as the most seasoned master mariner on the oceans of Aquarius. But she had, he discovered, a fair turn of speed, her diesel-electric drive pushing her through the water at a good twenty knots. She was single screw, with a right-handed propeller. Her wheelhouse and chartroom reminded him almost of the spaceships that he was accustomed to command, but the electronic gadgetry was not unfamiliar to him after the sessions he had put in on the various simulators in the Havenmaster's Control Tower. The only thing that he did not like was the Purcell Navigator squatting like a sinister octopus in its own cage abaft the chartroom. Oh, well, he would make sure that his young gentlemen had no truck with the electronic monster. He hoped.

"I don't like it either," said the tall, skinny, morose Captain Harrell, whom Grimes was relieving. "But it works. Even I have to admit that. It works."

Then Harrell led Grimes down to the big, comfortable day cabin where the two wives—Mrs. Harrell very dumpy and mousy alongside the slender Sonya—were waiting. The Harrells' baggage, packed and ready to be carried ashore, was against one bulkhead. On a table stood bottles and glasses, a bowl of cracked ice. The officers came in then, neat in their slate gray shirt-and-shorts uniforms, their black, gold-braided shoulderboards, to say good-bye to their old captain, to greet their new one. There was Wilcox, Chief Officer, a burly, blond young (but not too young) giant. There was Andersen, the Second, another giant, but red-haired. There was Viccini, the Third, slight and dark. And Jones, the Engineer, a fat, bald man who could have been any age, came up to be introduced, and with him he brought Mary Hales, the Electrician, a fragile, silver-headed little girl who looked incapable of changing a fuse. Finally there came Sally Fielding, Stewardess-Purser, plump and motherly.

Glasses were charged. "Well, Captain," began Harrell. "Or should I say Commodore, or Admiral?"

"Captain," Grimes told him.

"Well, Captain, your name's on the Register and the Articles. You've signed the Receipt for Items Handed Over. You've a good ship, and a good team of officers. Happy sailing!"

## ALTERNATE ORBITS

"Happy sailing," everybody repeated.

"Thank you, Captain," replied Grimes. "And I'm sure that we all wish you an enjoyable leave."

"And how are you spending it, Mrs. Harrell?" asked Sonya.

"We've a yacht," the other woman told her. "Most of the time we shall be cruising around the Coral Sea."

"A busman's holiday," commented Grimes.

"Not at all," Harrell told him, grinning for the first time. "There'll just be the two of us, so there'll be no crew problems. And no electronic gadgetry to get in my hair either."

"Happy sailing," said Grimes, raising his glass.

"Happy sailing," they all said again.

And it was happy sailing at first.

It did not take Grimes long to find his feet, his sea legs. "After all," he said to Sonya, "a ship is a ship is a ship . . ." He had been afraid at first that his officers and crew would resent him, an outsider appointed to command with no probationary period in the junior grades—but there hung about him the spurious glamour of that honorary admiral's commission, and his reputation as a maritime historian earned him respect. *Sonya Winneck's* people knew that he was on *Aquarius* to do a job, a useful job, and that his sailing as master of her was part of it.

Sonya enjoyed herself too. She made friends with the other women aboard: with Mary Hales, with Sally Fielding, with the darkly opulent Vanessa Wilcox, who had joined just before departure from Port Stellar, with Tessa and Teena, the Assistant Stewardesses, with the massive Jemima Brown who was queen of the beautifully mechanized galley. This shipboard life—*surface* shipboard life—was all so new to her, in spite of its inevitable resemblances to life aboard a spaceship. There was so much to see, so much to inquire into . . .

The weather was fine, mainly, with warm days and nights with just sufficient chill to provide a pleasant contrast. Grimes played with the sextant he had purchased in Port Stellar, became skilled in its use, taking altitude after altitude of the sun, of the planet's two moons, of such stars, planets and artificial satellites as were visible at morning and evening twilight. His officers watched with a certain amusement as he plotted position after position on the working chart, congratulated him when these coincided with those for the same times shown on the chart that was displayed on the screen

of the Purcell Navigator. And they, he was pleased to note, tended to ignore that contraption, consulting it only when there was a wide variance between positions taken by two observers.

A shipmaster, however, is more than a navigator. Pilotage was not compulsory for the majority of the ports visited by *Sonya Winneck*, although in each one of them pilots were available. Grimes had taken a pilot sailing from Port Stellar, but after the six-day run between that harbor and Tallisport decided to try to berth the ship himself. After all, he had spent hours in the simulator and, since joining his ship, had read Ardley's *Harbor Pilotage* from cover to cover.

This book, a standard, Terran, twentieth century work on the handling and mooring of ships, had been given him by the Havenmaster, who had said, "You should find this useful, John. Ardley was one of *the* authorities of his time. One thing I like about him—he says that anchors are there to be used. For maneuvering, I mean . . ." He laughed, then added, "But don't go making too much of a habit of it. It annoys chief officers!"

And so, having made a careful study of the large scale chart, the plan and the "sailing directions," Grimes stood in to Tallisport shortly after sunrise. The wheel was manned, the engines on stand by. According to the Tide Tables it was just two hours after first high water, which meant that *Sonya Winneck* would be stemming the ebb on her way in. (But, Wilcox had told him, complications were bound to crop up in this river harbor. All wharfage was on the western bank of the river, on the starboard hand entering—and to berth starboard side to is to risk damage in a vessel with a right-handed single screw, especially when the master is an inexperienced ship handler. Sometimes, however, an eddy, a countercurrent, set strongly along the line of wharfage, giving the effect of flood tide. If this eddy were running—and, only visual observation when approaching the berth would confirm this or not—Grimes would be able to bring the ship's head to starboard, letting go the starboard anchor to stub her around, and then, ease her alongside, port side to, with the anchor still on the bottom.)

Grimes stood into Tallisport. With his naked eye he could now see the Main Leads, two white towers, nicely in line. He told the Harbor Quartermaster to steer for them, to keep them right ahead. Yes, and there was the breakwater

to port, with its red beacon . . . The red beacon was abeam now, and *Sonya Winneck* was sweeping into the harbor in fine style.

"Hadh't you better reduce speed, sir?" suggested the Third Officer.

"Mphm. Thank you, Mr. Viccini. Better make it slow—no, dead slow."

"Dead slow, sir."

The rhythmic thudding of the diesel generators was unchanged, but there was a subtle diminution of vibration as the propeller revolutions decreased. The Main Leads were still ahead, but coming abeam to starboard were the two white obelisks that were the Leads into the Swinging Basin. "Port ten degrees," ordered Grimes. Would it be enough? Then he saw the ship's head swinging easily, heard the clicking of the gyro repeater. "Midships. Steady!"

He went out to the starboard wing of the bridge, looked aft. The Swinging Basin Leads were coming into line astern nicely. "Steady as you go!" he called.

Now *Sonya Winneck* was creeping up the last navigable reach of the river. To starboard was the line of wharfage, and behind it the clumps of greenery, spangled with blossoms like jewels, the white-walled houses, all clean and bright in the morning sun. But Grimes had no eye for scenery; he was too new to the game. Through his binoculars he studied the quay at which he was to berth, the furthest up river. Beyond it was a mess of dredging equipment, all part and parcel of the port expansion plan. Which side to would it be? He had still to make up his mind.

"Sir," said the Third Officer.

"Yes?"

"It doesn't look as though the eddy, the countercurrent is running, sir."

"What makes you think that, Mr. Viccini?"

The young man pointed to the small craft—a yacht, two fishing vessels—past which they were sliding. Their upstream moorings were bar taut, their downstream lines hanging in bights. "Mphm," grunted Grimes. So it was ebb all over the river. He made up his mind. "Tell the Chief and Second Officers it will be starboard side to. Tell Mr. Wilcox to have his port anchor ready."

He came to starboard, lined the ship's head up on the up river end of the wharf. With his mouth whistle he blew one

short, sharp blast. The chain cable of the port anchor rattled out through the pipe, the grip of the flukes in the mud acted as a brake. *Sonya Winneck* was still making way, but with the ebb against her and the drag of the anchor she was almost stopped.

*This*, thought Grimes, *is easy*, as he nosed in toward his berth.

But there was an eddy after all, and as soon as the ship was well inside it she was swept upstream toward the dredges, buoys and pipelines. "Hard a-starboard!" Grimes ordered. The anchor was still holding, luckily, and it acted as a fulcrum, checking the upstream motion of the stem while the stern was free to swing. The vessel was broadside on to the line of the river now, still approaching the wharf, but head on.

"Swing her, sir," suggested Viccini. "Get a headline ashore and tell the linesmen to run it to the down river end of the berth . . ."

Yes, thought Grimes, *it'll work. It'd better . . .*

A heaving line snaked ashore from the fo'c'sle head, was caught by one of the waiting linesmen. He and another man ran with it to the post indicated by the Chief Officer. Then the self-tensioning winch, whining, took the weight. Belatedly Grimes thought that he had better stop the engines, had better go astern before the ship's stem crashed through the wharf stringer. But the order had been anticipated. *A good lad, Viccini . . .* he thought. *But he'd better not make a habit of this sort of thing.*

Now *Sonya Winneck's* bows were being pulled downriver against the countercurrent, her stem still only a few feet from the stringer, the stern swinging in easily. "Stop her," Grimes ordered. She was alongside now, with the very gentlest of impacts, and the leading hand of the mooring gang was shouting up that she was in position.

Grimes filled and lit his pipe. "Make fast fore and aft," he said. "That'll do the wheel. Finished with engines." And then, "Mr. Viccini, I appreciate your help. Don't get me wrong, I like an officer to show initiative. But I think you should try to remember there's only one Master on the bridge."

"But, sir . . ."

"That's all right, Mr. Viccini. You did the right things,

and I appreciate it. I'll try to do the right things myself in future."

Probably the Third Officer would have made a full explanation to Grimes during the day, but as soon as the gangway was out the Winneck Line's local agent came aboard with the mail, and among it was a letter saying that Viccini was to be paid off to commence his annual leave and would be relieved that morning by a Mr. Denham.

*Sonya Winneck* continued her steady, round-the-planet progress, rarely straying north or south of the tropics. The met. screen in the chartroom rarely showed indications of disturbed weather conditions, and when it did these were invariably hundreds of miles from the ship's track. It was, Mr. Wilcox said to Grimes, the sort of weather you sign on for. The days and the nights passed pleasantly. At sea, there was sunbathing, swimming in the ship's pool that, when inflated, occupied all the foredeck between the forward and after cranes of the main hatch, deck golf and, in the evenings, a variety of games or a wide selection of programs on the playmasters installed throughout the accommodation. In port, the day's business over, there was so much to see, so much to do. There was *real* swimming from sun-washed, golden beaches, and surfing; and now and again Grimes was able to hire a small sailing yacht for the day and found this sport much more enjoyable than on the lakes of Lorn, where there was wind enough but it was always bitter. There were the waterfront taverns—and both Grimes and Sonya loved seafood. The Terran lobster, prawn, oyster and herring had all done well in the Aquarian seas, and there were the local delicacies: the sand crawlers, which were something like Earth's trilobites must have been, the butterfly fish and the sea steaks.

It was, for both of them, a holiday, but for Sonya it was a holiday that palled in time. It was all right for Grimes; he had his navigation to play with, his pilotage and, when he got around to it, research to carry out on the projected history and a chapter or so of it to write. His wife, however, was becoming bored.

It was a longish run between Lynnhaven and Port Johnson, all of seven days. During it Sonya found stacks of magazines in one of the lockers in the ship's office, back numbers of the *Merchant Shipping Journal*, dating back for

years. She brought a pile of them up to the master's day cabin. She said, "These could be useful to you, John." Grimes picked one up, leafed through it. "Mphm. All rather *dry* stuff. At the moment I'm trying to get the essential *feel* of this planet."

"But they're full of information."

"So's a dictionary."

She said, "Suppose I go through them, making notes of anything that might be useful to you . . ."

"That," he told her, "is very sweet of you, Sonya."

She made a grimace at him, then settled down with the supply of factual reading matter. Everything was there: specifications of new tonnage, sales, breakings up, wrecks, strandings, collisions, courts of inquiry. These latter were of interest to her. She could see how, time and time again, the unfortunate Master was given only seconds to decide what to do, while learned judges, counsel and marine assessors had weeks to decide what should have been done. And then, as she read on, nagging hints of some sort of pattern began to form in her mind, her trained mind. After all, she had been an intelligence officer, and a good one, in the Federation's Survey Service.

It seemed to her that the Winneck Line ships were getting into more than their fair share of trouble, with Lone Star Line running a close second. She knew little about the Lone Star Line, although she had seen their ships often enough in various ports and, with Grimes, had been a guest aboard a few of them for drinks and meals. They were well-run, well-maintained vessels. She could speak with more authority regarding the Winneck Line; *Sonya Winneck* was typical of their newer tonnage. There wasn't the same spit and polish as in the Lone Star, but there was a very real efficiency.

She read again the details of one of the collision cases. *Olga Winneck* had been bound up the Great Muddy River to Steelport, *Suzanne Winneck* had been outbound. The ships had passed each other—or had attempted to pass each other—in Collier's Reach, the navigable channel in that locality being both deep and wide. Suddenly, *Olga Winneck* had taken a sheer to port and, in spite of the efforts of both Masters to avert collision, had struck *Suzanne Winneck* on her port quarter, holing her so badly that she was obliged to return to dock for repairs.

There was the transcription of evidence:

Mr. Younghusband (counsel for Havenmaster's Office): Can you tell me, Mr. Margolies, what orders were given by Captain Hazzard?

Mr. Margolies (Third Officer of *Olga Winneck*): Yes, sir. The Master ordered, "Hard a-starboard! Stop engines! Full astern!"

Mr. Younghusband: And were these orders carried out?

Mr. Margolies: Of course. I at once put the controls to full astern.

Mr. Younghusband: And what about the wheel? Quartermasters have been known to put the helm the wrong way, especially in an emergency.

Mr. Margolies: The quartermaster put the wheel hard to starboard.

Mr. Younghusband: And did you look at the rudder indicator? It has been suggested that steering gear failure was a cause of the collision.

Mr. Margolies: Yes, I looked. The pointer was hard over to starboard.

And so it went on. It was established finally that both Masters had done all the right things, although Captain Hazzard should have realized that a delay was inevitable when switching directly from full ahead to full astern. It was thought that a tidal eddy had been responsible for the collision. The court recommended that ships passing in Collier's Reach keep each well to their own sides of the channel, also that speed be reduced.

That was one case. There were others, and Sonya made notes, drew up tables. There had been collisions in narrow channels and in the open sea. Some had been in clear weather, some in conditions of reduced visibility. The causes were various: tidal eddies, steering gear failure, radar breakdown and, inevitably, errors of judgment. And the Winneck Line and the Lone Star Line were having more than their fair share of marine casualties . . . It was odd, she thought. Odd. There was something rotten in the state of Aquarius.

She asked Grimes if she could browse through the ship's files of correspondence. He said, "Of course. They aren't top secret." She found the one labeled *Damage Reports*. It wasn't especially bulky. But its contents were interesting.

"Sir, (she read)

I regret to have to report that whilst berthing this



## ALTERNATE ORBITS

morning at No.3 Inner East, Port Kantor, the stem of the vessel came into heavy contact with the starboard side of the Lone Star Line's *Canopic*. Damage to *Sonya Winneck* was superficial only—please see enclosed sketch—but that to the other ship was considerable and, I am informed by *Canopic's* master, will necessitate dry-docking.

I entered the harbor at 0545 hrs., standing in on the Main Leads. When clear of the breakwaters I reduced to dead slow and altered course to port, steering for the shore end of No.3 Jetty. Visibility was good, wind was ENE at about 10 knots, tidal influence, it being just after low water slack, was negligible.

When my bridge was just abeam of *Canopic's* stern, however, *Sonya Winneck* took a sudden sheer to port. I at once ordered a hard a-starboard, stopped the engines and ordered full astern. Also I signaled to the Chief Officer to let go the starboard anchor, but unfortunately it jammed in the pipe, and was released too late to have any effect. In spite of the application of full starboard rudder and full stern power, contact occurred at 0555 hrs.

It is possible that I underestimated the force of the wind while standing in to my berth, but, even so, find it hard to account for the sudden sheer to port . . .”

But *Sonya Winneck* was sometimes at the receiving end.

“Sir,

I have to report that this afternoon, at 1327 hrs., the vessel was struck by the Company's *Elizabeth Winneck*, which same was proceeding down river, bound for sea. Unfortunately, it being Saturday afternoon, with no work in progress, no officers were on deck at the time of the contact, and the Company's gangway watchman was at his place of duty, at the head of the gangway, on the inshore side of the vessel.

Damage, fortunately, was not extensive and all above the waterline. My Chief Officer's report is enclosed herewith. No doubt you will be hearing from Captain Pardoe of *Elizabeth Winneck* . . .”

There were several more letters, some going into great detail, others composed on the good old principle of “least said, soonest mended.” With two exceptions the other ships concerned were units of either the Winneck or the Lone Star fleets. One of the exceptions was the contact with *Iron Duchess*. On that occasion Captain Harrell, Grimes's prede-

cessor, had been trying to berth his ship during a howling gale. The other occasion was a collision with a ferry steamer in Carrington Harbor, with fortunately no loss of life.

So, Sonya wondered, just what was the connection between the Winneck Line and the Lone Star Line? She borrowed from the Chief Officer's office the bulky *Aquarian Registry* in which was listed comprehensive details of all the commercial shipping of the planet. Against the name of each ship were the lines of information: tonnage, gross, net and deadweight; propulsion; speed; length overall, length between posts, breadth . . . And builders.

She looked up her namesake first. She had been built by the Carrington State Dockyard. She looked up *Canopic*. Her builders were Varley's Dockyard, in Steelport. She looked up *Elizabeth Winneck*—another Varley's job. So it went on. The majority of the collisions had occurred between ships constructed at those two yards.

And what about the contact that her husband, Grimes, had so narrowly averted, that time coming into Newhaven? What was the name of the ship that he had almost (but not quite) hit? *Orionic* . . . She looked it up. Carrington State Dockyard. She murmured, "All us Carrington girls must stick together . . ."

"What was that?" demanded Grimes, looking up from his book.

"Just a thought," she told him. "Just a passing thought."  
"Mphm."

"Do ships *really* have personalities?" she asked.

He grinned. "Spacemen and seamen like to kid themselves that they do. Look at it this way. You're bringing a ship in—a spaceship or a surface ship—and you've failed to allow for *all* the factors affecting her handling. Your landing or berthing isn't up to your usual standard. But you kid yourself, and your officers that it wasn't *your* fault. You say, 'She was a proper little bitch, wasn't she? Wouldn't do a thing right . . .' But *you* were the one who wasn't doing a thing right."

She said, "I've handled ships too."

"I know, my dear. I've seen you do it. Your landing technique is a little too flashy for my taste."

"Never mind that now. I'm talking about surface ships. Is there any reason to believe, John, that two ships built to the

same design, but in different yards, would have conflicting personalities?"

Grimes was starting to get annoyed with his wife. "Damn it all," he expostulated, "spacemen's superstitions are bad enough! But I'm surprised that you, of all people, should pay any heed to seamen's superstitions."

"But are they superstitions? Couldn't a machine absorb, somehow, something of the personalities of the people who built it, the people who handle it?"

"Hogwash," said Grimes.

"If that's the way you feel about it . . ." She slumped in her deep chair, struck a cigarillo on her thumbnail, put it to her mouth, looked at her husband through the wreathing smoke. "All right. Before you get back to your precious research, what do the initials P N mean?"

"In what context?"

Sonya nudged with a slim, sandaled foot the bulky *Aquarian Registry*, which lay open on the deck in front of her. "It's printed against the names of some of the ships, the newer ships—but only those built by the Carrington State Dockyard or Varley's."

"P . . . N . . ." muttered Grimes. "P . . . N . . . ? We can ask the Mate, I suppose . . ."

"But you don't like to," she scoffed. "You're the Captain, you know everything."

"Almost everything," he qualified smugly. The ship lurched suddenly, and Grimes knew the reason. When last he had been on the bridge he had been slightly perturbed by the chart presented in the met. screen, televised from one of the weather satellites. Ahead of *Sonya Winneck* was a deepening depression, almost stationary. He had considered altering course to try to avoid it—but, after all, he had a big, powerful ship under his feet, well found, stoutly constructed. And, he had thought, he would not like to be remembered on this world as a fair weather sailor. Even so, he saw in his mind's eye the chart—the crowded isobars, the wind arrows with their clockwise circulation. Now the heavy swell running outward from the center, like ripples from a pebble dropped into a pond, was beginning to make itself felt. He looked at the aneroid barometer on the bulkhead. The needle had fallen ten millibars since he had last set the pointer, two hours ago.

He said, "I fear we're in for a dirty night."

She said, "It's what you're paid for."

He grunted, got up from his chair, went up to the bridge by the inside companionway to the chartroom. He looked at the instruments over the chart table. According to the Chernikeeff Log, speed through the water had already dropped by half a knot. The barograph showed a fairly steep fall in pressure. The met. screen, set for the area through which the ship was passing, showed a chart almost identical with the one that he had last seen.

He went out to the bridge. The sky was mainly overcast now, with the larger of the two Aquarian moons, almost full, showing fitfully through ragged breaks in the cloud. There was high altitude wind, although it had yet to be felt at sea level. But the swell seemed to be increasing.

Young Mr. Denham, the Third Officer, came across from the wing of the bridge. He said, rather too cheerfully, "Looks like a blow, sir."

"We can't expect fine weather all the time," Grimes told him. He stood with his legs well apart, braced against the motion of the ship. He wondered if he would be seasick, then consoled himself with the thought that both the actual Lord Nelson and the fictional Lord Hornblower had been afflicted by this malady.

Mr. Denham—since Grimes had torn that strip off him regarding the unauthorized engine movements he had tended to overcompensate—went on chirpily, "At this time of the year, sir, the revolving storms in these waters are unpredictable. In theory the center should be traveling east, away from us, but in practice it's liable to do anything."

"Oh?"

"Yes, sir. I remember one when I was in the old *Sally-Sara Winneck*, that is. Captain Tregenza tried to outmaneuver it; we had a pile of deck cargo that trip, teak logs from Port Mandalay. But it was almost as though it had a brain of its own. Finally it sat right on top of us and matched speed and course, no matter which way we steered. We lost all the cargo off the foredeck, and the wheelhouse windows were smashed in . . ."

*Cheerful little swine . . .* thought Grimes. He stared ahead into the intermittently moonlit night, at the long swell that was coming in at an angle to the ship's course. *Sonya Winneck's* bows lifted then dipped, plunging into and through the moving dune of water. They lifted again, and a white

cascade poured aft from the break of the fo'c'sle, spangled with jewels of luminescence. Grimes said, "Anyhow, we have no deck cargo this trip."

"No, sir."

He remained on the bridge a while longer. There was nothing that he could do, and he knew it. The ship was far from unseaworthy, capable of riding out a hurricane. There was ample sea room; the Low Grenadines were many miles to the north of her track. And yet he felt uneasy, could not shake off a nagging premonition. Something, he somehow knew, was cooking. But what, when and where?

At last he grunted, "You know where to find me if you want me. Good night, Mr. Denham."

"Good night, sir."

Back in his quarters his uneasiness persisted. He told Sonya that he would sleep on the settee in his day cabin, so as to be more readily available in the event of any emergency. She did not argue with him; she, too, felt a growing tension in the air. It could have been that she was sensitive to his moods but, she told him, she didn't think so. She quoted, *"By the pricking of my thumbs something wicked this way comes."*

He laughed. "A tropical revolving storm is not wicked, my dear. Like any other manifestation of the forces of nature it is neither good nor evil."

She repeated, "Something wicked this way comes."

They said good night then, and she retired to the bedroom and he disposed himself comfortably on the settee. He was rather surprised that sleep was not long in coming.

But he did not enjoy his slumber for more than a couple of hours. A particularly violent lurch awakened him, almost pitched him off his couch. He switched on a light, looked at the aneroid barometer. The needle was down another twenty millibars. And, in spite of the well-insulated plating of the accommodation, he could hear the wind, both hear and feel the crash of the heavy water on deck. He thrust his feet into his sandals and, only in his shorts (Master's privilege) went up to the bridge. He found the Second Officer—it was now the middle watch—in the wheelhouse, looking ahead through the big clear view screen. Grimes joined him. When his eyes became accustomed to the semi-darkness he could see that the wind was broad on the star-

board bow; he could see, too, that with each gust it was veering, working gradually around from southeast to south. *Southern Hemisphere*, he thought. *Clockwise circulation, and the low barometer on my left hand . . .* Now that he had something to work on he might as well avoid the center with its confused, heavy seas. "Bring her round to starboard easily," he told the Second Officer. "Bring wind and sea ahead."

"Wind and sea ahead, sir." The officer went to the controls of the autopilot. Grimes watched the bows swinging slowly, then said, "That should do, Mr. Andersen."

"Course one three five now, sir."

Grimes went back into the chartroom, looked down at the chart, busied himself briefly with parallel rulers and dividers. He grunted his satisfaction. This new course took him even further clear of the Low Grenadines, that chain of rocky islets that were little more than reefs. There was nothing to worry about.

He was aware that Sonya was standing behind him; there was a hint of her perfume, the awareness of her proximity. He said without turning around, "Passengers not allowed on the bridge."

She asked, "Where are we?"

He indicated with the points of the dividers the penciled cross of the position, the new course line extending from it. "I'm more or less, not quite heaving to. But she's easier on this heading, and it pulls her away from the eye of the storm."

She said, "There's a lot to be said for spaceships. They don't pitch and roll. When you're in your virtuous couch you're not slung out of it."

"We take what comes," he told her.

"We haven't much option, have we?"

Then they went below again, and she made coffee, and they talked for awhile, and eventually Grimes settled down to another installment of his broken night's sleep.

The next time he awakened it was by the insistent buzzing of the bridge telephone, which was in his bedroom. He rolled off the settee, stumbled through the curtained doorway. Sonya, looking rather hostile, lifted the instrument off its rest, handed it to him.

"Master here," said Grimes into the mouthpiece.

"Second Officer, sir. There's a Mayday . . ."

"I'll be right up."

The Second Mate was in the chartroom, plotting positions on the chart. He straightened as Grimes came in, turned to speak to him. "It's *Iron Warrior*, sir. One of their big bulk carriers. She's broken down, lying in the trough, and her cargo's shifted. Zinc concentrates."

"Not good. Where is she?"

The young man stood away from the chart so that Grimes could see, indicated the other ship's position with the point of a pencil. "Here, sir. Just twenty miles south of the Low Grenadines. And she reports a southerly gale, the same as we're getting."

"Not good," said Grimes again. "Not good at all. She'll be making leeway, drifting . . ." Swiftly he measured the distance between *Sonya Winneck's* last recorded position—electronic navigation had its good points!—and that given by the disabled ship. One hundred and fifty nautical miles . . . And *Sonya Winneck* would have to turn, putting the wind right aft. With her high superstructure this should mean a marked increase of speed . . . Suppose she made twenty knots over the ground . . . Twenty into one hundred and fifty . . . Seven and a half hours . . . He looked at the chartroom clock. Oh three thirty . . .

"Put your standby man on the wheel, Mr. Andersen," he ordered. "I'm bringing her round manually."

He went out into the wheelhouse. Both moons were down, but the sky had cleared. Overhead the scattered stars were bright; and bright, too, were the living stars thrown aloft and back in the sheets of spray each time that the ship's prow crashed down to meet the racing seas. Grimes stood there, waiting, hoping for a lull, however brief. He glanced behind him, saw that the wheel was manned and that Andersen was standing beside the helmsman.

He looked ahead again. It seemed to him that the pitching of the ship was a little less pronounced, that sea and swell were a little less steep. "Port," he ordered. "Easily, easily . . ." He heard the clicking of the gyro-repeater as the ship's head started to come round. And then he saw it, broad on the starboard bow, a towering cliff of water, white capped, a freak sea. "Hard a-port!" Grimes shouted. "Hard over!"

She responded beautifully, and the clicking of the repeater was almost one continuous note. She responded beauti-

fully, but not quite fast enough. The crest of the dreadful sea was overhanging the bridge now, poised to fall and smash. Still she turned, and then she heeled far over to port, flinging Grimes and the Second Officer and the helmsman into an untidy huddle on that side of the wheelhouse. She shuddered as the tons of angry water crashed down to to her poop, surged forward along her decks, even onto the bridge itself. There was a banging and clattering of loose gear, cries and screams from below. But miraculously she steadied, righted herself, surging forward with only a not very violent pitching motion.

Somehow Grimes got to his feet, disentangling himself from the other two men. He staggered to the untended wheel, grasped the spokes. He looked at the repeater card. Three two oh . . . Carefully he applied starboard rudder, brought the lubber's line to the course that had been laid off on the chart, three three five. He saw that Andersen and the seaman had recovered their footing, were standing by awaiting further orders.

"Put her back on automatic," he told the Second Officer. "On this course." He relinquished the wheel as soon as this had been done. "Then take your watch with you and make rounds through the accommodation. Let me know if anybody's been hurt."

"Who the hell's rocking the bloody boat?" It was Wilcox, the Chief Officer. Then, as he saw Grimes by the binnacle, "Sorry, sir."

"It's an emergency, Mr. Wilcox. A Mayday call. *Iron Warrior*, broken down and drifting on to the Low Grenadines. We're going to her assistance."

"What time do you estimate that we shall reach her, Captain?"

"About eleven hundred hours."

"I'd better start getting things ready," replied the Mate.

Grimes went back into the chartroom, to the transceiver that had been switched on as soon as the auto-alarm had been actuated by the Mayday call. "*Sonya Winneck* to Ocean Control, Area Five," he said.

"Ocean Control to *Sonya Winneck*. I receive you. Pass your message."

"I am now proceeding to the assistance of *Iron Warrior*. Estimated time of visual contact ten thirty hours, Zone Plus Seven."



"Thank you, *Sonya Winneck*. *Pleiaidic* cannot be in the vicinity until thirteen hundred hours at the earliest. Please use Channel Six when working *Iron Warrior*. Call me on Sixteen to keep me informed. Over."

He switched to Channel Six. "*Sonya Winneck to Iron Warrior . . .*"

"*Iron Warrior* here, *Sonya Winneck*." The other Captain's voice, was, perhaps, a little too calm.

"How are things with you, *Iron Warrior*?"

"Bloody awful, to be frank. A twenty degree list, and my boats and rafts smashed on the weather side. Estimated rate of drift, two knots."

"I should be with you in seven hours," said Grimes. "I shall try to take you in tow."

"We'll have everything ready, Captain."

"Good. We shall be seeing you shortly. Over and standing by."

Wilcox had come into the chartroom. He said, "Everybody's been informed, sir. The Chief reckons that he can squeeze out another half knot."

"Anybody hurt when she went over?"

"Only minor lacerations and contusions, sir."

"Such as this," announced, *Sonya*, who had joined the others in the chartroom, putting a cautious hand up to the beginnings of a black eye. "But it's in a good cause."

*Iron Warrior* was not a pretty sight.

She lay wallowing in a welter of white water, like a dying sea beast. The seas broke over her rust-colored hull in great explosions of spray, but now and again, during brief lulls, the extent of the damage that she had sustained could be made out. She was a typical bulk carrier, with all the accommodation aft, with only a stumpy mast right forward and her mainmast growing out of her funnel, and no cargo gear but for one crane on the poop for ship's stores and the like. That crane, Grimes could see through his binoculars, was a twisted tangle of wreckage. That would explain why the *Warrior's* Captain had not used oil to minimize the effect of breaking waves; probably the entrance to the storerooms was blocked. And there must be some other reason why it had not been possible to pump diesel fuel overside—even though a mineral oil is not as effective as vegetable or animal oil it is better than nothing. The side of the bridge seemed to be

stove in, and under the boat davits dangled a mess of fiberglass splinters.

Beyond her—and not far beyond her, a mere three miles—was the black, jagged spine of Devlin's Islet, dead to leeward. It seemed more alive, somehow, than the stricken ship, looked like a great, malevolent sea monster creeping nearer and ever nearer through the boiling surf toward its dying prey.

Grimes was using oil, a thin trickle of it from his scuppers, wads of waste soaked in it thrown overside to leeward. Luckily there had been plenty of it in *Sonya Winneck's* storerooms—fish oil for the preservation of exposed wire ropes, a heavy vegetable oil for the treatment of wooden decks and brightwork. It was beginning to have effect; the thin, glistening surface film was a skin over the water between the two ships, an integument that contained the sea, forcing some semblance of form upon it. The swell was still there—heavy, too heavy—but the waves were no longer breaking, their violence suppressed.

Aft, Andersen and his men were standing by the rocket gun. The heavy insurance wire was already flaked out ready for running, its inboard end taken not only around both pairs of bitts—these, in a ship with self-tensioning winches, were rarely used for mooring, but there was always the possibility of a tow—but also around the poop house. The sisal messenger was coiled down handy to the line-throwing apparatus.

On the bridge, Grimes conned his ship. She was creeping along parallel to *Iron Warrior* now, at reduced speed. She was making too much leeway for Grimes's taste; unless he was careful there would be two wrecks instead of only one. Too, with the swell broad on the beam *Sonya Winneck* was rolling heavily, so much so that accurate shooting would be impossible. But the necessary maneuvers had been worked out in advance. At the right moment Grimes would come hard to port, presenting his stern to the *Iron Warrior*. Andersen would loose off his rocket, aiming for a point just abaft the break of the other ship's fo'c'sle head, where men were already standing by. They would grab the light, nylon rocket line, use it to pull aboard the heavier messenger, use that to drag the end of the towing wire aboard, shackling it to the port anchor cable. After that, it would be plain sailing (Grimes hoped). He would come ahead slowly, slowly, taking the weight gently, trying to avoid the imposition of over-

much strain on either vessel. Slowly but surely he would pull the wounded *Warrior* away from the hostile fortifications. (*Come off it, Grimes*, he told himself sternly. *Don't be so bloody literary.*)

"Hard a-port!" he ordered.

"Hard a-port, sir!" The clicking of the repeater was audible above the shrieking of the wind.

"Ease her . . . Midships . . . Steady! Steady as you go!"

*Sonya Winneck* hung there, her stern a bare two cables from the side of *Iron Warrior*. Grimes thought, *I cut that rather too close. But at this range it'll be impossible for Andersen to miss.* To the Third Officer, at the radar, he called, "Are we opening the range?"

"Slowly, sir."

It was time that Andersen got his rocket away. The ship was not pitching too badly; firing at just the right moment should not be difficult. As long as the missile passed over the target it would be a successful shot. Grimes went out to the wing of the bridge to watch. The air scoop dodger deflected the wind, throwing it up and over, so it was not too uncomfortable away from the wheelhouse.

Andersen fired—and at precisely the wrong moment the ship's head fell off heavily to starboard. The rocket streaked through the air, arcing high, a brief orange flare against the gray, ragged clouds, a streamer of white smoke, and behind it the fluorescent yellow filament of the nylon line. Inevitably it missed, finally splashing to the sea well forward of and beyond *Iron Warrior's* bows.

Grimes didn't see it drop. He stormed into the wheelhouse, bawled at the helmsman, "What the hell do you think you're playing at?"

"It's the wheel, sir," The man's voice was frightened. "It turned in my hands. I can't budge it!"

The ship was coming round still, turning all the time to starboard. The gale force wind and her own engines were driving her down on to the helpless *Warrior*. "Stop her!" ordered Grimes. "Full astern!"

Denham was still at the radar, so Wilcox jumped to the engine controls. He slammed the lever hard over to the after position. Still the ship was making headway—but, at last slowing. She stopped at last, her stern scant feet from *Iron Warrior's* exposed side. Grimes could see the white faces of

her people as they stared at him, as they watched, in horrified disbelief, this rescuer turned assassin.

*Sonya Winneck* was backing away now, her stern coming up into the wind. She was backing away, but reluctantly. Wilcox shouted, "Denham, come and give me a hand! I can't keep this bloody handle down!"

Grimes dragged his attention away from the ship he had so nearly rammed to what was happening on his own bridge. Both the Chief and Third Officer—and Wilcox was a big, strong man—were having to exert all their strength to keep the metal lever in its astern position. It was jerking, forcing itself up against their hands.

Sonya—who until now had been keeping well out of the way—grabbed him by the arm. "Tell the Chief to put the engine controls on manual!" she screamed. "I know what's happening!"

"What's happening?"

"No time now to tell you. Just put her on manual, and get Lecky up here!"

Grimes went to the telephone, rang down to the engine-room. "Manual control, your end, Mr. Jones," he ordered. "Keep her on full astern until I order otherwise. And send Miss Hales up to the bridge. At once."

Thankfully, Wilcox and Denham released their painful grip on the bridge control lever. On the console the revolution indicator still showed maximum stern power. Ahead, the distance between the two ships was fast diminishing. From the VHF transceiver came a frightened voice, "What's happening, *Sonya Winneck*? What's happening?"

"Tell him," said Grimes to Denham, "that we're having trouble with our bridge controls. We'll get a line aboard as soon as we can."

Wilcox, watching the indicator, yelled, "She's stopped! The bitch is coming ahead again!"

Sonya said urgently, "There's only one thing to do, John. Shut off the Purcell Navigator. *Iron Warrior* has P N against her name in the Registry—and she was built by Varley's." She turned to Mary Hales, who had just come onto the bridge. "Mary, switch off that bloody tin brain, or pull fuses, or something—but kill it!"

The pretty little blonde was no longer so pretty. On one side of her head the hair was charred and frizzled, and her smooth face was marred by an angry burn. "We've been

trying to," she gasped. "The Chief and I. It won't let us."

"She's coming astern again," announced Wilcox. "She's . . . No, she's stopped . . ."

"Watch her, Mr. Wilcox," ordered Grimes. He ran with his wife and the Electrician to the house abaft the chartroom in which the Purcell Navigator lived. It squatted there sullenly on its four stumpy legs, the dials set around its spherical body glaring at them like eyes. From its underside ran armored cables, some thick and some thin—that one leading aft and down must be the main power supply, the ones leading into the wheelhouse and chartroom would be connected to various controls and navigational equipment. On the after bulkhead of the house was a switchboard and fuse box. Mary Hales went straight to this, put out her hand to the main switch. There was a sudden, intense violet flare, a sharp crackling, the tang of overheated metal. The girl staggered back, her blistered hands covering her eyes. "That's what happened to the engineroom switchboard!" she wailed. "It's welded itself in the *On* position!" Then, using language more seamanlike than ladylike, she threw herself at the fuse box. She was too late—but perhaps this was as well. Had she got the lid open she would have been blinded.

Still cursing softly, she grabbed a spanner from her belt. Her intention was obvious; she would unscrew the retaining nut holding the main supply lead firmly in its socket. But an invisible force yanked the tool out of her hand, threw it out of the open door.

Grimes watched, helpless. Then he heard Sonya snarling, "Do something. *Do* something, damn you!" She thrust something into his right hand. He looked down at it. It was the big fire ax from its rack in the chartroom. He got both hands about the haft, tried to swing up the head of the weapon, staggered as the magnetic fields which now were the machine's main defense tugged at it. But he lifted the ax somehow, brought it crashing down—and missed his own right foot by a millimeter. Again he raised the ax, straining with all his strength, and again struck at the thick cable. The ship lurched heavily, deflecting his aim, and, fantastically, the magnetic deflection brought the head back to its target. The armable writhed away from the blow, but not in time, not enough. The keen edge bit home, in a coruscation of violet sparks. And Mary Hales, with a smaller ax that she had found somewhere, was chopping away, sob-

bing and cursing; and Sonya was jabbing with a heavy screwdriver at the thing's "eyes"—and so, at last, it died.

And so it died, damaged beyond its built-in powers of self-regeneration. (Mary Hales made sure of that.) And so Grimes was able to get a line aboard *Iron Warrior*, and the *Warrior's* people got the towing wire shackled onto their anchor cable, and slowly, slowly but surely, the crippled ship was dragged to safety, away from the avidly waiting fangs and talons of Devlin's Islet; the rocky teeth and claws that, when the tow finally commenced, had been less than half a mile distant.

The Purcell Navigator was dead, and its last flares of energy had destroyed or damaged much more than itself. The gyro-compass and the autopilot were inoperative (but the ship had a magnetic compass and hand steering). Loran and radar were burned out, inertial navigator and echometer were beyond repair, even the Chernikeeff Log was useless. But Grimes was not worried. He had sextant, chronometer, ephemeris and tables—and the great navigators of Earth's past had circled their globe with much less in the way of equipment. In the extremely unlikely event of his not knowing where he was he could always ask *Iron Warrior* for a fix—but he did not think that he would have to do so.

He did, however, urge the *Warrior's* Master to put his own Purcell Navigator out of commission, explaining why in some detail. Then he went to the house abaft the chartroom where, under the direction of Mary Hales, Wilcox and his men were loosening the holding down bolts, disconnecting the cables that had not already been cut. (There might still be a flicker of life in the thing, some capability of self-repair.) He watched happily as the Mate and three brawny ratings lifted the spherical casing from the deck, staggered with it out the door.

"What shall we do with it, sir?" asked the Mate.

"Give it a buoyancy test," ordered Grimes. He followed the men to the side rail of the bridge, watched as they tipped it over. It sank without a trace.

Grimes was relieved of his command in Longhaven, after the successful completion of the tow, and flown back to Steep Island, accompanied by Sonya. Neither he nor his wife felt very strong when they boarded the airship—the

crews of both *Sonya Winneck* and *Iron Warrior* had united in laying on a farewell party more enthusiastic than restrained. ("You *must* be glad to see the back of us," Sonya had remarked at one stage of the proceedings.) Even so, old and tired as he was feeling, Grimes had insisted on seeing the airship's captain so as to be assured that the craft was not fitted with a Purcell Navigator. Then, he and his wife went to their cabin and collapsed into their bunks.

Steep Island, although not officially an airport, had a mooring mast, so a direct flight was possible. When the time came for Grimes and Sonya to disembark they were feeling better and, in fact, had been able to put the finishing touches to their report.

Captain Thornton, the Havenmaster, welcomed them warmly but was obviously anxious to hear what they had to tell him. In minutes only they were all seated in the Havenmaster's Lookout and Thornton was listening intently as they talked.

When they were finished, he smiled grimly. "This is good enough," he said. "It's good enough even for the Council of Master Wardens. I shall issue orders that those infernal machines are to be rendered inoperative in every ship fitted with them, and that no more are to be put aboard any Aquarian vessel. Then we make arrangements to ship them all back to where they came from."

Grimes was surprised, and said so. He was used to having his recommendations adopted eventually, but in most cases there was a lot of argument first.

Thornton laughed. "What you've said is what I've been saying, John, for months. But nobody listens to me. I'm just a reactionary old shellback. But you, sir, as well as being a well-known maritime historian, have also one foot—at least—in what to us is still the future. You're a master astronaut, you hold the rank of commodore in the Space Navy of your Confederacy. They'll listen to you, when they won't listen to me."

"It's Sonya they should listen to," Grimes said. "She's a spacewoman *and* an intelligence officer. She tied the loose ends together."

"But it was all so obvious," she said smugly. "Two yards, and two yards only, on this planet licensed to fit the Purcell Navigator: Varley's and the Carrington State Dockyard. Two . . . sororities? Yes, two sororities of ships, the Varley Sister-

hood and the Carrington Sisterhood, each hating the other. Limited intelligence, but, somehow, a strong, built-in spite, and also a strong sense of self-preservation. That much, I think, was intended by those electronic geniuses on Elektra—and possibly more, but I'll come to that later.

"Anyhow, if a Carrington sister saw a chance of taking a swipe at a Varley sister without much risk of damage to herself she'd take it. And *vice versa*. Hence all the collisions, and all the minor berthing accidents. Now and again, of course, the sense of self-preservation worked to everybody's benefit . . ." She smiled at her husband rather too sweetly. "I know of at least one bungled berthing where everything, almost miraculously, came right in the end . . ."

"But what's behind it all?" asked the Havenmaster. "You're the Intelligence Officer. Is it, do you think, intentional on somebody's part?"

"I don't know, Tom. I'd have to snoop around on Elecktra to find out, and I doubt if the Elektrans would let me. But try this idea on for size . . . What if the Elektrans want to make Aquarius absolutely dependent upon them?"

"It could be . . ." mused Thornton. "It could be . . ." He went up, walked to the bookshelves, took out a book, opened it. It was Grimes's own *Times Of Transition*. The Havenmaster leafed through it to find the right place. He read aloud, " 'And so was engendered a most unseamanlike breed of navigator, competent enough technicians whose working tools were screwdrivers and voltmeters rather than sextants and chronometers. Of them it could never be said *Every hair a ropeyarn, every fingernail a marlinespike, every drop of blood pure Stockholm tar*. They were servants to rather than masters of their machines, and ever they were at the mercy of a single fuse . . . ' " He shut the book with a slam. He said, "It can't happen here."

"Famous last words," scoffed Sonya, but her voice was serious.

"It mustn't happen here," said Grimes.



## THE MAN WHO SAILED THE SKY

IT WAS FORTUNATE, Sonya always said, that the Federation Survey Service's *Star Pioneer* dropped down to Port Stellar, on Aquarius, when she did. Had not transport back to the Rim Worlds, although it was by a roundabout route, become available it is quite possible that her husband would have become a naturalized Aquarian citizen. Seafaring is no more (and no less) a religion than spacefaring; be that as it may, John Grimes, Master Astronaut, Commodore of the Rim Confederacy's Naval Reserve, Honorary Admiral of the Ausiphalian Navy and, lately, Master Mariner, was exhibiting all the zeal of the new convert. For some months he had sailed in command of an Aquarian merchantman and, although his real job was to find out the cause of the rapidly increasing number of marine casualties, he had made it plain that insofar as his own ship was concerned he was no mere figurehead. Although (or because) only at sea a dog watch, he was taking great pride in his navigation, his seamanship, his pilotage and his ship handling.

"Damn it all," he grumbled to Sonya, "if our lords and masters wanted us back they'd send a ship for us. I know that *Rim Eland* isn't due here for another six weeks, on her normal commercial voyage—but what's wrong with giving the Navy a spot of deep space training? The Admiralty could send a corvette . . ."

"You aren't all that important, John."

"I suppose not. I'm only the Officer Commanding the Naval Reserve, and the Astronautical Superintendent of Rim Runners . . . Oh, well—if *they* don't want me, there're some people who do."

"What do you mean?" she asked sharply.

"Tom told me that my Master Mariner's Certificate of Competency and my Pilotage Exemption Certificates are valid for all time. He told me, too, that the Winneck Line will give me another appointment as soon as I ask for it. There's just one condition . . ."

"Which is?"

"That we take out naturalization papers."

"No," she told him. "No, repeat, capitalize, underscore no."

"Why not, my dear?"

"Because this world is the bitter end. I always thought that the Rim Worlds were bad enough, but I put up with them for your sake and, in any case, they've been improving enormously over the past few years. But Aquarius . . . It's way back in the twentieth century!"

"That's its charm."

"For you, perhaps. Don't get me wrong. I enjoyed our voyage in *Sonya Winneck*—but it was no more than a holiday cruise . . ."

"An odd sort of holiday."

"You enjoyed it too. But after not too long a time you'd find the life of a seafaring commercial shipmaster even more boring than that of a spacefaring one. Do you want to be stuck on the surface of one planet for the rest of your life?"

"But there's more variety of experience at sea than there is in space . . ."

Before she could reply there was a tap on the door. "Enter!" called Grimes.

Captain Thornton, the Havenmaster of Aquarius, came into the suite. He looked inquiringly at his guests. "Am I interrupting something?" he asked.

"You are, Tom," Sonya told him. "But you're welcome to join the argument, even though it will be the two of you against me. John's talking of settling down on Aquarius to continue his seafaring career."

"He could do worse," said Thornton.

Sonya glared at the two men, at the tall, lean, silver-haired ruler of Aquarius, at her stocky, rugged husband whose prominent ears, already flushing, were a thermometer of his rising temper. Grimes, looking at her, had the temerity to smile slightly, appreciatively. Like the majority of auburn-haired women she was at her most attractive when about to blow her top.

"What are you grinning at, you big ape?" she demanded.

"You."

Before she could explode Thornton hastily intervened. He said, "I came in with some news that should interest you, both of you. I've just got the buzz that the Federation's *Star Pioneer* is putting in to Port Stellar. I know that you used to be in the Survey Service, John, and that Sonya still holds

a Reserve commission, and it could be that you'll be meeting some old shipmates . . ."

"Doubtful," said Grimes. "The Survey Service has a very large fleet, and it's many years since I resigned . . ."

"Since you were asked to resign," remarked Sonya.

"You were still in your cradle, so you know nothing about the circumstances. But there might be some people aboard that Sonya would know."

"We shall soon find out. I have to throw a party for the Captain and officers—and you, of course, will be among the guests."

Grimes knew none of *Star Pioneer's* officers, but Sonya was acquainted with Commander James Farrell, the survey ship's captain. How well acquainted? Grimes felt a twinge of jealousy as he watched them chatting animatedly, then strolled over to the buffet for another generous helping of the excellent chowder. There he was engaged in conversation by two of the *Pioneer's* junior lieutenants. "You know, sir," said one of them, "your name's quite a legend in the Service . . ."

"Indeed?" Grimes felt flattered.

The other young man laughed—and Grimes did not feel quite so smug. "Yes, sir. Any piece of insubordination—justifiable insubordination, of course—is referred to as 'doing a Grimes . . .'"

"Indeed?" The Commodore's voice was cold.

The first young man hastened to make amends. "But I've heard very senior officers, admirals and commodores, say that you should never have been allowed to resign . . ."

Grimes was not mollified. "Allowed to resign? It was a matter of choice, *my* choice. Furthermore . . ." And then he became aware that Sonya, with Commander Farrell in tow, was making her way toward him through the crowd. She was smiling happily. Grimes groaned inwardly. He knew that smile.

"John," she said, "I've good news."

"Tell me."

"Jimmy, here, says that I'm entitled to a free passage in his ship."

"Oh."

"I haven't finished. The Survey Service Regulations have been modified since *your* time. The spouses of commissioned

officers, even those on the Reserve List, are also entitled to a free passage if suitable accommodation is available. *Star Pioneer* has ample passenger accommodation, and she will be making a courtesy call at Port Forlorn after her tour of the Carlotti Beacon Stations in this sector of space . . ."

"We shall be delighted to have you aboard, sir," said Farrell.

"Thank you," replied Grimes. He had already decided that he did not much care for the young Commander who, with his close-cropped sandy hair, his pug nose and his disingenuous blue eyes, was altogether too much the idealized Space Scout of the recruiting posters. "Thank you. I'll think about it."

"We'll think about it," said Sonya.

"There's no mad rush, sir," Farrell told him, with a flash of white, even teeth. "But it should be an interesting trip. Glebe, Parramatta, Wyong and Esquel . . ."

Yes, admitted Grimes to himself, *it could be interesting*. Like Aquarius, Glebe, Parramatta and Wyong were rediscovered Lost Colonies, settled originally by the lodejammers of the New Australia Squadron. Esquel was peopled by a more or less humanoid race that, like the Grollons, had achieved the beginnings of a technological civilization. Grimes had read about these worlds, but had never visited them. And then, through the open windows of the hall, drifted the harsh, salty smell of the sea, the thunderous murmur of the breakers against the cliff far below.

*I can think about it*, he thought. *But that's as far as it need go.*

"We'll think about it," Sonya had said—and now she was saying more. "Please yourself, John, but I'm going. You can follow me when *Rim Eland* comes in. If you want to."

"You'll not consider staying here on Aquarius?"

"I've already made myself quite clear on that point. And since you're hankering after a seafaring life so badly it'll be better if you make the break *now*, rather than hang about waiting for the Rim Runners' ship. Another few weeks here and it'll be even harder for you to tear yourself away."

Grimes looked at his wife. "Not with you already on the way home."

She smiled. "That's what I thought. That's why I took Jimmy's offer. He is rather sweet, isn't he?"

"All the more reason why I should accompany you aboard his blasted ship."

She laughed. "The old, old tactics always work, don't they?"

"Jealousy, you mean?" It was his turn to laugh. "Me, jealous of that puppy!"

"Jealous," she insisted, "but not of *him*. Jealous of the Survey Service. You had your love affair with the Service many years ago, and you've gotten over it. You've other mistresses now—Rim Runners and the Rim Worlds Naval Reserve. But I was still in the middle of mine when I came under the fatal spell of your charm. And I've only to say the word and the Service'd have me back; a Reserve Officer can always transfer back to the Active List . . ." She silenced Grimes with an upraised hand. "Let me finish. If I'd taken passage by myself in *Rim Eland* there'd have been no chance at all of my flying the coop. There's so much of *you* in all the Rim Runners' ships. And the Master and his officers would never have let me forget that I was Mrs. Commodore Grimes. Aboard *Star Pioneer*, with you not there, I'd soon revert to being Commander Sonya Verrill . . ."

Slowly, Grimes filled and lit his pipe. Through the wreathing smoke he studied Sonya's face, grave and intent under the gleaming coronal of auburn hair. He knew that she was right. If he persisted in the pursuit of this new love for oceangoing steamships, she could return to her old love for the far-ranging vessels of the Interstellar Federation's military and exploratory arm. They might meet again sometime in the distant future, they might not. And always there would be the knowledge that they were sailing under different flags.

"All right," he said abruptly. "Better tell your boyfriend to get the V.I.P. suite ready."

"I've already told him," she said. She grinned. "Although as a mere Reserve Commander, traveling by myself, I shouldn't have rated it."

The last farewells had been said, not without real regrets on either side, and slowly, the irregular throbbing of her inertial drive drowning the brassy strains of the traditional *Anchors Aweigh*, *Star Pioneer* lifted from the Port Stellar apron. Guests in her control room were Grimes and Sonya. Usually on such occasions the Commodore would be watch-

ing the ship handling technique of his host, but today he was not. He was looking down to the watery world fast falling away below. Through borrowed binoculars he was staring down at the slender shape that had just cleared the breakwaters of the Port Stellar seaport, that was proceeding seawards on yet another voyage; and he knew that on her bridge *Sonya Winneck's* officers would be staring upward at the receding, diminishing ship of space. He sighed, not loudly, but Sonya looked at him with sympathy. That was yet another chapter of his life over, he thought. Never again would he be called upon to exercise the age-old skills of the seaman. But there were worse things than being a spaceman.

He pulled his attention away from the viewport, took an interest in what was going on in the control room. It was all much as he remembered it from his own Survey Service days—dials and gauges and display units, telltale lights, the remote controls for inertial, auxiliary rocket and Mannschenn Drives, the keyboard of the Gunnery Officer's "battle organ." And, apart from the armament accessories, it was very little different from the control room of any modern merchantman.

The people manning it weren't quite the same as merchant officers; and, come to that, weren't quite the same as the officers of the Rim Worlds Navy. There was that little bit of extra smartness in the uniforms, even to the wearing of caps inside the ship. There were the splashes of fruit salad on the left breast of almost every uniform shirt. There was the crispness of the Captain's orders, the almost exaggerated crispness of his officers' responses, with never a departure from standard Naval terminology. This was a taut ship, not unpleasantly taut, but taut nonetheless. (One of Grimes's shortcomings in the Survey Service had been his inability, when in command, to maintain the requisite degree of tension.) Even so, it was pleasant to experience it once again—especially as a passenger, an outsider. Grimes looked at Sonya. She was enjoying it too. Was she enjoying it too much?

Still accelerating, although not uncomfortably, the ship drove through the thin, high wisps of cirrus. Overhead the sky was indigo, below Aquarius was already visibly a sphere, an enormous mottled ball of white and gold and green and blue—mainly blue. Over to the west'ard was what looked like the beginnings of a tropical revolving storm. And who would be caught in it? Grimes wondered. Anybody he knew? In deep space there were no storms to worry about, not now,

## ALTERNATE ORBITS

although in the days of the lodejammers magnetic storms had been an ever-present danger.

"Secure all!" snapped Commander Farrell.

"Hear this! Hear this!" the Executive Officer said sharply into his microphone. "All hands. Secure for free fall. Report."

Another officer began to announce, "Sick Bay—secure. secure. Enlisted men—secure. Hydroponics—secure . . ." It was a long list. Grimes studied the sweep second hand of his wristwatch. By this time a Rim Runners' tramp would be well on her way. Quite possibly, he admitted, with some shocking mess in the galley or on the farm deck. ". . . Mannschenn Drive Room—secure. Inertial drive room—secure. Auxiliary rocket room—secure. All secure, sir."

"All stations secure, sir," the Executive Officer repeated to the Captain.

"Free fall—execute!"

The throb of the inertial drive faltered and died in mid-beat.

"Centrifugal effect—stand by!"

"Centrifugal effect—stand by!"

"Hunting—execute!"

"Hunting—execute!"

The mighty gyroscopes hummed, then whined. Turning about them, the ship swung to find the target star, the distant sun of Glebe, lined it up in the exact center of the Captain's cartwheel sights and then fell away the few degrees necessary to allow for galactic drift.

"Belay gyroscopes!"

"Belay gyroscopes!"

"One gravity acceleration—stand by!"

"One gravity acceleration—stand by!"

"One gravity acceleration—execute!"

"One gravity acceleration—execute!"

The inertial drive came to life again.

"Time distortion—stand by!"

"Time distortion—stand by!"

"Mannschenn Drive—stand by!"

"Mannschenn Drive—stand by!"

"Mannschenn Drive—3 lyps—On!"

"Mannschenn Drive—3 lyps—On!"

There was the familiar thin, high keening of the ever-precessing gyroscopes, the fleeting second (or century) of temporal disorientation, the brief spasm of nausea; and then,

ahead, the sparse stars were no longer steely points of light but iridescent, pulsating spirals, and astern the fast diminishing globe of Aquarius could have been a mass of multi-hued, writhing gases. *Star Pioneer* was falling down the dark dimensions, through the warped continuum toward her destination.

*And about time*, thought Grimes, looking at his watch again. *And about bloody time.*

Glebe, Parramatta, Wyong . . . Pleasant enough planets, with something of the Rim Worlds about them, but with a flavor of their own. Lost Colonies they had been, settled by chance, discovered by the ships of the New Australia Squadron after those hapless lodejammers had been thrown light-years off course by a magnetic storm, named after those same ships. For generations they had developed in their own way, isolated from the rest of the man-colonized galaxy. Their development, Commander Farrell complained, had been more of a retrogression than anything else. Commodore Grimes put forward his opinion, which was that these worlds were what the Rim Worlds should have been, and would have been if too many highly efficient-types from the Federation had not been allowed to immigrate.

Sonya took sides in the ensuing argument—the wrong side at that. “The trouble with you, John,” she told him, “is that you’re just naturally against all progress. That’s why you so enjoyed playing at being a twentieth century sailor on Aquarius. That’s why you don’t squirm, as *we* do, every time that you hear one of these blown away Aussies drawl, ‘She’ll be right . . .’”

“But it’s true, ninety-nine percent of the time.” He turned to Farrell. “I know that you and your smart young technicians were appalled at the untidiness of the Carlotti Stations on all three of these planets, at the slovenly bookkeeping and all the rest of it. But the beacons work and work well, even though the beacon keepers are wearing ragged khaki shorts instead of spotless white overalls. And what about the repairs to the one on Glebe? They knew that it’d be months before the spares for which they’d requisitioned trickled down through the Federation’s official channels, and so they made do with the materials at hand . . .”

“The strip patched with beaten out oil drums . . .” muttered Farrell. “Insulators contrived from beer bottles . . .”



"But that beacon works, Commander, with no loss of accuracy."

"But it shouldn't," Farrell complained.

Sonya laughed. "This archaic setup appeals to John, Jimmy. I always used to think that the Rim Worlds were his spiritual home—but I was wrong. He's much happier on these New Australian planets, which have all the shortcomings of the Rim but nary a one of the few, the very few good points."

"What good points are you talking about?" demanded Grimes. "Overreliance on machinery is one of them, I suppose. That's what I liked about Aquarius, and what I like about these worlds—the tacit determination that the machine shall be geared to man, not the other way round . . ."

"But," said Sonya. "The contrast. Every time that we step ashore it hits us in the eye. Jimmy's ship, with everything spick and span, every officer and every rating going about his duties at the very peak of efficiency—and this city (if you can call it that) with everybody shambling around at least half-asleep, where things get done after a fashion, if they get done at all. It must be obvious even to an old-fashioned . . . seaman like yourself."

"Aboard a ship," admitted Grimes, "any sort of ship, one has to have some efficiency. But not too much."

The three of them were sitting at a table on the wide veranda of the Digger's Arms, one of the principal hotels in the city of Paddington, the capital (such as it was) of Wyong. There were glasses before them, and a bottle, its outer surface clouded with condensation. Outside the high sun blazed down on the dusty street, but it was pleasant enough where they were, the rustling of the breeze in the leaves of the vines trailing around the veranda posts giving an illusion of coolness, the elaborate iron lace of pillars and railing contributing its own archaic charm.

A man came in from outside, removing his broad-brimmed hat as soon as he was in the shade. His heavy boots were noisy on the polished wooden floor. Farrell and Sonya looked with some disapproval at his sun-faded khaki shirt, the khaki shorts that could have been cleaner and better pressed.

"Mrs. Grimes," he said. "How yer goin'?"

"Fine, thank you, Captain," she replied coldly.

"How's tricks, Commodore?"

"Could be worse," admitted Grimes.

"An' how's the world treatin' you, Commander?"

"I can't complain," answered Farrell, making it sound like a polite lie.

The newcomer—it was Captain Dalby, the Port Master—pulled up a chair to the table and sat down with an audible *thump*. A shirt-sleeved waiter appeared. "Beer, Clarry," ordered Dalby. "A schooner of old. An' bring another coupla bottles for me friends." Then, while the drinks were coming, he said, "Your Number One said I might find you here, Commander."

"If it's anything important you want me for," Farrell told him, "you could have telephoned."

"Yair. Suppose I could. But yer ship'll not be ready ter lift off fer another coupla days, an' I thought the walk'd do me good . . ." He raised the large glass that the waiter had brought to his lips. "Here's lookin' at yer."

Farrell was already on his feet. "If it's anything serious, Captain Dalby, I'd better get back at once."

"Hold yer horses, Commander. There's nothin' you can do till you get there."

"Get *where*?"

"Esquel, o' course."

"What's wrong on Esquel?"

"Don't rightly know." He drank some more beer, taking his time over it. "But a signal just came in from the skipper of the *Epileptic Virgin* that the Esquel beacon's on the blink."

"*Epsilon Virginis*," corrected Farrell automatically. Then—"But this could be serious . . ."

"Nothin' ter work up a lather over, Commander. It's an unwatched beacon, so there's no need to worry about the safety of human personnel. An' it's not an important one. Any nog who can't find his way through this sector o' space without it ain't fit ter navigate a plastic duck across a bathtub!"

"Even so . . ." began Farrell.

"Sit down and finish your beer," said Grimes.

"Yer a man after me own heart, Commadore," Dalby told him.

"Did the Master of *Epsilon Virginis* have any ideas as to what might have happened?" asked Sonya.

"If he had, Mrs. Grimes, he didn't say so. Mechanical breakdown, earthquake, lightnin'—you name it." He grinned happily at Farrell. "But it suits me down ter the ground that you're here, Commander. If you weren't, I'd have ter

take me own maintenance crew to Esquel an' fix the bloody thing meself. I don't like the place, nor its people . . ." He noticed that Sonya was beginning to look at him in a rather hostile manner. "Mind yer, I've nothin' against wogs, as long as they keep ter their own world an' I keep ter mine."

"So you've been on Esquel?" asked Sonya in a friendly enough voice.

"Too right. More'n once. When the beacon was first installed, an' three times fer maintenance. It's too bleedin' hot, for a start. It just ain't a white man's planet. An' the people . . . Little, gibberin' purple monkeys—chatter, chatter, chatter, jabber, jabber, jabber. Fair gets on yer nerves. I s'pose their boss cockies ain't all that bad when yer get ter know 'em—but they know what side their bread's buttered on an' try ter keep in our good books. If they hate our guts they don't show it. But the others—the lower classes I s'pose you'd call 'em—do hate our guts, an' they do show it."

"It often is the way, Captain," said Sonya. "Very often two absolutely dissimilar races are on far friendlier terms than two similar ones. I've never been to Esquel, but I've seen photographs of the natives and they're very like Terran apes or monkeys; and the apes and monkeys are our not so distant cousins. You and your men probably thought of the Esquelians as caricatures in very bad taste of human beings, and they thought of you in the same way."

"Yair. Could be. But I'm glad it's not me that has ter fix the beacon."

"Somebody has to," said Farrell virtuously.

*Star Pioneer* was on her way once more, driving along the trajectory between Wyong and Esquel, her inertial drive maintaining a normal one standard gravity acceleration, her Mannschenn Drive set for cruising temporal precession rate. Farrell had discussed matters with Grimes and Sonya and with his own senior officers. All agreed that there was no need for urgency; the Esquel beacon was not an essential navigational aid in this sector of space; had it been so it would have been manned.

There was, of course, no communication with the world toward which the ship was bound. The Carlotti beacons are, of course, used for faster-than-light radio communication between distant ships and planets, but the one on Esquel was a direction finding device only. A team of skilled technicians

could have made short work of a conversion job, rendering the beacon capable of the transmission and reception of FTL radio signals—but there were no human technicians on Esquel. Yet. Imperialism has long been a dirty word; but the idea persists even though it is never vocalized. The Carlotti beacon on Esquel was the thin end of the wedge, the foot inside the door. Sooner or later the Esquelian rulers would come to rely upon that income derived from the rental of the beacon site, the imports (mainly luxuries) that they could buy with it; and then, not blatantly but most definitely, yet another planet would be absorbed into the Federation's economic empire.

There was conventional radio on Esquel, but *Star Pioneer* would not be able to pick up any messages while her time and space warping interstellar drive was in operation, and not until she was within spitting distance of the planet. There were almost certainly at least a few Esquelian telepaths—but the Survey Service ship was without a psionic radio officer. One should have been carried; one had been carried, in fact, but she had engineered her discharge on Glebe, where she had become wildly enamored of a wealthy grazier. Farrell had let her go; now he was rather wishing that he had not done so.

The *Pioneer* fell down the dark dimensions between the stars, and life aboard her was normal enough. There was no hurry. Unmanned beacons had broken down before, would do so again. Meanwhile there was the pleasant routine of a ship of war in deep space, the regular meals, the card-playing, the chess and what few games of a more physically demanding nature were possible in the rather cramped conditions. Sonya was enjoying it, Grimes was not. He had been too long away from the spit and polish of the Survey Service. And Farrell—unwisely for one in his position—was starting to take sides. Sonya, he not very subtly insinuated, was his breed of cat. Grimes might have been once, but he was no longer. Not only had he resigned from the finest body of astronauts in the galaxy, known or unknown, but he had slammed the door behind him. And as for this craze of his for—of all things!—seamanship . . . Grimes was pained, but not surprised, when Sonya told him, one night, that aboard this ship he was known as the Ancient Mariner.

Ahead, the Esquel sun burgeoned; and then came the day, the hour and the minute when the Mannschenn Drive

was shut down and the ship reemerged into the normal continuum. She was still some weeks from Esquel itself, but she was in no hurry—until the first messages started coming in.

Grimes sat with Sonya and Farrell in the control room. He listened to the squeaky voice issuing from the transceiver. "Calling Earth ship . . . Calling any Earth ship . . . Help . . . Help . . . Help . . ."

It went on and on without break, although it was obvious that a succession of operators was working a more or less regular system of reliefs at the microphone. Farrel acknowledged. It would be minutes before the radio waves carrying his voice reached the Esquelian receiver, more minutes for a reply to come back. He said, as they were waiting for this, that he hoped that whoever was making the distress call had more than one transceiver in operation.

Abruptly the gibbering plea for unspecified aid ceased. A new voice came on the speaker. "I talk for Cabarar, High King of Esquel. There has been . . . revolution. We are . . . besieged on Drarg Island. Cannot hold out . . . much longer. Help. You must . . . help."

There was a long silence, broken by Farrell. "Number One," he ordered, "maximum thrust."

"Maximum thrust, sir." Then, into the intercom, "All hands to acceleration couches! Maximum thrust!"

The backs of the control room chairs fell to the horizontal, the leg rests lifted. The irregular beat of the inertial drive quickened, maddening in its noisy nonrhythm. Acceleration stamped frail human bodies deep into the resilient padding of the couches.

*I'm getting too old for this sort of thing*, thought Grimes. But he retained his keen interest in all that was going on about him. He heard Farrell say, every word an effort, "Pilot . . . Give me . . . data . . . on . . . Drarg . . ."

"Data . . . on . . . Drarg . . . sir . . ." replied the Navigator.

From the corner of his eye Grimes could see the young officer stretched supine on his couch, saw the fingers of his right hand crawling among the buttons in the arm rest like crippled white worms. A screen came into being overhead, a Mercator map of Esquel, with the greens and yellows and browns of sprawling continents, the oceanic blue. The map expanded; it was as though a television camera was falling rapidly to a position roughly in the middle of one of

the seas. There was a speck there in the blueness. It expanded, but not to any extent. It was obvious that Drarg was only a very small island.

The map was succeeded by pictorial representations of the beacon station. There were high, rugged cliffs, with the sea foaming angrily through the jagged rocks at the water-line. There was a short, spidery jetty. And, over all, was the slowly rotating antenna of the Carlotti beacon, an ellipsoid Mobius strip that seemed ever on the point of vanishment as it turned about its long axis, stark yet insubstantial against the stormy sky.

Farrell, speaking a little more easily now, said, "There's room on that plateau to land a boat—but to put the ship down is out of the question . . ."

Nobody suggested a landing at the spaceport. It must be in rebel hands; and those same rebels, in all probability, possessed at least a share of Earth-manufactured weapons and would be willing to use them against the Earthmen whose lackeys their rulers had been. *Star Pioneer* was armed, of course—but too active participation in other people's wars is frowned upon.

"You could land on the water," said Grimes. "To leeward of the island."

"I'm not a master mariner, Commodore," Farrell told him rather nastily. "But this is *my* ship, and I'm not hazarding her. We'll orbit about Esquel and send down a boat."

*I hope that one boat will be enough*, thought Grimes, not without sympathy. *The mess isn't of your making, Jimmy boy, but you'll have to answer the "please explains."* And as human beings we have some responsibility for the nongs and drongoes we've been propping up with Terran bayonets—or Terran credits, which have been used to purchase Terran bayonets or their present day equivalent.

"Whatever his shortcomings," commented Sonya, "High King Cabrarar used his brains. He knew that if the beacon ceased functioning there'd be an investigation . . ."

"And better us to make it," said Farrell, "than Dalby and his bunch of no hopers."

"Why?" asked Grimes coldly.

"We're disciplined, armed . . ."

"And if you'll take my advice, Commander, you'll not be in a hurry to use your arms. The top brass is apt to take a

dim view of active intervention in outsiders' private squabbles."

"But Cabrarar . . ."

". . . *was* the Federation's blue-eyed boy. His kingdom now is limited to one, tiny island. I've no doubt that your lords and masters are already considering dickering with whatever new scum comes to the top."

"Sir . . ." One of the officers was trying to break into the conversation.

"Yes, Mr. Penrose?"

"A signal, sir, from Officer Commanding Lindisfarne Base . . ."

The young man crawled slowly and painfully to where his captain was stretched out on the acceleration couch, with a visible effort stretched out the hand holding the flimsy. Farrell took it, managed to maneuver it to where his eyes could focus on it.

After a long pause he read aloud, "Evacuate King Cabrarar and entourage. Otherwise do nothing, repeat nothing, to antagonize new regime on Esquel."

"As I've been saying," commented Grimes. "But at least they're exhibiting some faint flickers of conscience."

Shortly thereafter Farrell ordered a half hour's reduction of acceleration to one G, a break necessary to allow personnel to do whatever they had to do essential to their comfort. Grimes and Sonya—she with some reluctance—left the control room and retired to their own quarters.

*Star Pioneer* was in orbit about Esquel. Free fall, after the bone-crushing emergency acceleration, was a luxury—but it was not one that Commander Farrell and those making up the landing party were allowed to enjoy for long. Farrell had decided to send down only one boat—the pinnace. There was insufficient level ground on the island for more than one craft to make a safe landing. He had learned from King Cabrarar that the rebels had control of the air, and that their aircraft were equipped with air-to-air missiles. An air-spacecraft hovering, awaiting its turn to land, would be a tempting target—and effective self-defense on its part could easily be the beginnings of a nasty incident.

The deposed monarch and his party comprised three hundred beings, in terms of mass equivalent to two hundred Earthmen. In addition to its crew the pinnace could lift

fifty men; so four rescue trips would be necessary. While the evacuation was in process a small party from the ship would remain on the island, deciding what in the way of stores, equipment and documents would be destroyed, what lifted off. Sonya had volunteered to be one of the party, pointing out that she was the only representative of the Intelligence Branch of the Survey Service in the ship, Reserve commission notwithstanding. Too, Esquelian was one of the many languages at her command; some years ago it had been intended that she visit Esquel, at the time of the installation of the Carlotti beacon, but these orders had been canceled when she was sent elsewhere on a more urgent mission. So, even though she had never set foot on the planet, she could make herself understood and—much more important—understand what was being said in her hearing.

Grimes insisted on accompanying his wife. He was an outsider, with no standing—but, as he pointed out to Farrell, this could prove advantageous. He would have more freedom of action than *Star Pioneer's* people, not being subject to the orders of the distant Flag Officer at Lindisfarne Base. Farrell was inclined to agree with him on this point, then said, "But it still doesn't let *me* off the hook, Commodore. Suppose you shoot somebody who, in the opinion of my lords and masters, shouldn't have been shot . . . And suppose I say, 'But, sir, it was Commodore Grimes, of the Rim Worlds Naval Reserve, who did the shooting . . . ' What do *they* say?"

"Why the bloody hell did you let him?" replied Grimes, laughing. "But I promise to restrain my trigger finger, James."

"He's made up his mind to come," Sonya said. "But not to worry. After all his playing at being a merchant sea captain he'll not know one end of a gun from the other . . ."

So, with the landing party aboard, the pinnace broke out of its bay and detached itself from the mother ship. The young lieutenant at the controls was a superb boat handler, driving the craft down to the first tenuous wisps of atmosphere, then decelerating before friction could overheat the skin. Drarg Island was in the sunlit hemisphere, the sky over which was unusually clear—so clear that there was no likelihood of mistaking the smoke from at least two burning cities for natural cloud. Navigation presented no problems. All that the officer had to do was to home on a continuous signal from the transmitter on the island. Grimes



would have liked to have played with the bubble sextant and the ephemerides—produced by *Star Pioneer's* navigator just in case they would be needed—that were part of the boat's equipment, but when he suggested so doing Sonya gave him such a scornful look that he desisted.

There was the island: a slowly expanding speck in the white-flecked sea. And there, a long way to the westward, were two airships, ungainly dirigible balloons. They must have seen the pinnace on her way down, but they made no attempt to intercept; a blimp is not an ideal aircraft in which to practice the *kamikaze* technique. But, remarked Farrell, they would be reporting this Terran intervention to their base. The radio operator found their working frequency and Sonya was able to translate the high-pitched squeakings and gibberings.

"As near as I can render it," she reported, "they're saying, 'The bastard king's bastard friends have come . . .' In the original it's much more picturesque." The operator turned up the gain to get the reply. " 'Keep the bastards under observation,' " said Sonya. Then, " 'Use Code 17A . . .' "

"They can use any code they please," commented Farrell. "With what weaponry there is on this world, the island's impregnable. It'll be more impregnable still after we've landed a few of our toys."

"Never underrate primitive peoples," Grimes told him. He dredged up a maritime historical snippet from his capacious memory. "In one of the wars on Earth—the Sino-Japanese War in the first half of the twentieth century—a modern Japanese destroyer was sent to the bottom by the fire of a concealed battery of primitive muzzle-loading cannon, loaded with old nails, broken bottles and horseshoes for luck . . ."

"Fascinating, Commodore, fascinating," said Farrell. "If you see any muzzle-loaders pointed our way, let me know, will you?"

Sonya laughed unkindly.

Grimes, who had brought two pipes with him, took out and filled and lit the one most badly in need of a clean.

They dropped down almost vertically on to the island, the lieutenant in charge of the pinnace making due allowance for drift. As they got lower they could see that the elliptical Mobius strip that was the antenna of the Carlotti beacon was still, was not rotating about its long axis. Draped

around it were rags of fabric streaming to leeward in the stiff breeze. It looked, at first, as though somebody had improvised a wind sock for the benefit of the landing party—and then it was obvious that the fluttering tatters were the remains of a gasbag. A little to one side of the machinery house was a crumpled tangle of wickerwork and more fabric, the wreckage of the gondola of the crashed airship. Some, at least, of the refugees on the island must have come by air.

Landing would have been easy if the Esquelians had bothered to clear away the wreckage. The lieutenant suggested setting the pinnacle down on top of it, but Farrell stopped him. Perhaps he was remembering Grimes's story about that thin-skinned Japanese destroyer. He said, "There's metal there, Mr. Smith—the engine, and weapons, perhaps, and other odds and ends. We don't want to go punching holes in ourselves . . ."

So the pinnacle hovered for a while, vibrating to the noisy, irregular throb of her inertial drive, while the spidery, purple-furred humanoids on the ground capered and gesticulated. Finally, after Sonya had screamed orders at them through the ship's loudhailer, a party of them dragged the wreckage to the edge of the cliff, succeeded in pushing it over. It plunged untidily down to the rocks far below. There was a brilliant orange flash, a billowing of dirty white brown smoke, a shock wave that rocked the pinnacle dangerously. There must have been ammunition of some kind in that heap of debris.

Farrell said nothing. But if looks could have killed, the King, standing aloof from his loyal subjects, distinguishable by the elaborate basketwork of gold and jewels on his little, round head, would have died. Somebody muttered, "Slovenly bastards . . ." Grimes wondered if the rebels were any more efficient than the ruling class they had deposed, decided that they almost certainly must be. It was such a familiar historical pattern.

The pinnacle grounded. The noise of the inertial drive faded to an irritable mumble, then ceased. Farrell unbuckled his seat belt, then put on his cap, then got up. Sonya—who was also wearing a uniform for the occasion—did likewise. Somehow, the pair of them conveyed the impression that Grimes had not been invited to the party, but he followed them to the airlock, trying to look like a duly accredited ob-

server from the Rim Worlds Confederacy. The airlock doors, inner and outer, opened. The Commodore sniffed appreciatively the breeze that gusted in, the harsh tang of salt water that is the same on all oceanic worlds. His second sniff was not such a deep one; the air of the island was tainted with the effluvium of too many people cooped up in far too small a space.

The ramp extended. Farrell walked slowly down it, followed by Sonya, followed by Grimes, followed by two ratings with machine pistols at the ready. The King stood a few yards away, watching them, surrounded by his own officers, monkeylike beings on the purple fur of whose bodies gleamed the golden ornaments that were badges of rank.

Stiffly (reluctantly?) Farrell saluted.

Limply the King half raised a six-fingered hand in acknowledgment. The rings on his long fingers sparkled in the afternoon sunlight. He turned to one of the staff, gibbering.

The being faced Farrell, baring yellow teeth as he spoke. "His Majesty say, why you no come earlier?"

"We came as soon as we were able," said Farrell.

There was more gibbering, unintelligible to all save Sonya. Then—"His Majesty say, where *big ship*? When you start bomb cities, kill rebels?"

Farrell turned to face his own people. He said, "Take over, please, Commander Verrill. You know the language. You might be able to explain things more diplomatically than me. You know the orders."

"I know the orders, Commander Farrell," said Sonya. She stepped forward to face the King, speaking fluently and rapidly. Even when delivered by her voice, thought Grimes, this Esquelian language was still ugly, but she took the curse off it.

The King replied to her directly. He was literally hopping from one splayed foot to the other with rage. Spittle sprayed from between his jagged, yellow teeth. The elaborate crown on his head was grotesquely awry. He raised a long, thin arm as though to strike the woman.

Grimes pulled from his pocket the deadly little Minetti automatic that was his favorite firearm. Viciously, Farrell knocked his hand down, whispering, "Hold it, Commodore! Don't forget that we represent the Federation . . ."

"You might," snarled Grimes.

But the King had seen the show of weapons; Grimes learned later that the two spacemen had also made threatening gestures with their machine pistols. He let his arm fall to his side. His clawed fingers slowly straightened. At last he spoke again—and the unpleasant gibbering was less high-pitched, less hysterical.

Sonya translated. "His Majesty is . . . disappointed. He feels that he has been . . . betrayed."

"Tell his Majesty," said Farrell, "that my own rulers forbid me to take part in this civil war. But His Majesty and those loyal to him will be transported to a suitable world, where they will want for nothing."

Grimes tried to read the expression on the King's face. Resignation? Misery? It could have been either, or both. Then his attention was attracted by the glint of metal evident in the crowd behind the deposed monarch. He saw that most of the Esquelians were armed, some with vicious-looking swords, others with projectile weapons, archaic in design, but probably effective enough. He doubted if any of the natives would be able to fly the pinnacle—but a human pilot might do what he was told with a knife at his throat.

Farrell spoke again. "Tell His Majesty, Commander Verrill, that if he has any ideas about seizing my pinnacle he'd better forget 'em. Tell him that those odd-looking antennae poking out from their turrets are laser cannon, and that at the first sign of trouble this plateau will be one big, beautiful barbecue. Tell him to look at that bird, there . . ." he pointed . . . "over to the eastward." He raised his wrist to his mouth, snapped an order into the microphone.

After Sonya finished her translation, everybody looked at the bird—if bird it was. It was a flying creature of some kind, big, with a wide wing span. It was a carrion eater, perhaps, hovering to leeward of the island in the hope of a meal. It died suddenly in a flare of flame, a gout of greasy smoke. A sparse sprinkling of smoldering fragments drifted down to the surface of the sea.

There was an outburst of squealing and gibbering. The Esquelians, with quite advanced armaments of their own at the time of Man's first landing on their world, had never, until now, been treated to a demonstration of the more sophisticated Terran weaponry. But they were people who knew that it is not the *bang* of a firearm that kills.

"His Majesty," said Sonya, "demands that he and his peo-

ple be taken off this island, as soon as possible, if not before." She grinned. "That last is a rather rough translation, but it conveys the essential meaning."

"I am happy to obey," replied Farrell. "But he and his people will have to leave all weapons behind."

There was more argument, and another demonstration of the pinnacle's firepower, and then the evacuation was gotten under way.

It had been intended, when the beacon was established on Drarg Island, that the island itself should serve as a base for some future survey party. The rock was honeycombed with chambers and tunnels, providing accommodation, should it be required, for several hundred humans. At the lowest level of all was the power station, fully automated, generating electricity for lights and fans as well as for the Carlotti beacon. The refugees had been able to live there in reasonable comfort—and in considerable squalor. Grimes decided that, as soon as things quietened down, he would get Sonya to inquire as to whether or not the flush toilet had been invented on Esquel. In spite of the excellent ventilation system, the stench was appalling.

But it was necessary for Sonya, at least, to go down into those noisome passages. In spite of the King's protests, Farrell had ordered that no property be lifted from the island; his orders were to save life, and life only. There were tons, literally, of gold and precious stones. There were tons of documents. These latter were, of course, of interest, and Sonya was the only member of *Star Pioneer's* party able to read them. And so, accompanied by Grimes and two junior officers, she went into the room in which the papers had been stacked, skimmed through them, committing those that she thought might be important to microfilm. Now and again, for the benefit of her helpers, she translated. "This," she told them, "seems to be the wages sheet for the palace staff . . . No less than fourteen cooks, and then fifty odd scullions and such . . . And a food taster . . . And a wine taster . . . And, last of all, and the most highly paid of the lot, a torturer. He got twice what the executioner did . . ." She passed the sheet to the Ensign who was acting as photographer, picked up the next one. "H'm. Interesting. This is the pay list for the Royal Guard. The Kardonar—roughly equivalent to Colonel—got less than the Third Cook . . ."

"This could be just yet another Colonels' Revolt," commented Grimes. He looked at his watch, which had been adjusted to local time. "Midnight. Time we had a break. This stink is getting me down."

"You can say that again, sir," agreed one of the Ensigns.

"All right," said Sonya at last. "I think we've skimmed the cream down here."

"*Cream?*" asked Grimes sardonically.

They made their way up the winding ramps, through the tunnels with their walls of fused rock, came at last to the surface. The plateau was brightly illumined by the floodlights that Farrell's men had set up. The pinnacle was away on a shuttle trip, and only a handful of natives remained, huddling together for warmth in the lee of the beacon machinery house. The King, Grimes noted sardonically, was not among them; obviously he was not one of those captains who are last to leave the sinking ship. He was quite content to let Farrell be his stand in.

The Commander walked slowly to Grimes and Sonya. "How's it going, Commander Verrill?" he asked.

"Well enough," she replied. "We've enough evidence to show that this was a thoroughly corrupt regime."

"Physically, as well as in all the other ways," added Grimes. "This fresh air tastes good! How are you off for deodorants aboard *Star Pioneer*, Commander Farrell?"

"Not as well as I'd like to be, Commodore. But I'll put the bulk of the passengers in deep freeze, so it shouldn't be too bad." He looked up at the sky. "It'll be a while before the pinnacle is back. Perhaps, sir, you might like a look at some of the surface craft that these people came out to the island in. There's a half dozen of them at the jetty; rather odd-looking contraptions . . ."

"I'd like to," said Grimes.

Farrell led the way to the edge of the plateau, to a stairway, railed at the seaward edge, running down the cliff face to a sheltered inlet in which was a short pier. Moored untidily alongside this were six sizable boats, and there was enough light from the floods at the cliff top for Grimes to make out details before he and the others commenced their descent.

"Yes, I'd like a closer look," he said. "Steam, I'd say, with those funnels. Paddle steamers. Stern-wheelers. Efficient in smooth water, but not in a seaway . . ."

He led the way down the stairs, his feet clattering on the iron treads. He said, "I'd like a trip in one of those, just to see how they handle . . ."

"Out of the question, Commodore," laughed Farrell.

"I know," said Grimes; as Sonya sneered, "You and your bloody seamanship!"

They stepped from the stairway on to the concrete apron, walked across it to the foot of the jetty. Grimes stopped suddenly, said, "Look!"

"At what?" demanded Sonya.

"At that craft with the red funnel . . . That's smoke, and a wisp of steam . . . She's got steam up . . ."

Farrell's laser pistol was out of its holster, and so was Sonya's. Grimes pulled his own Minetti out of his pocket. Cautiously they advanced along the pier, trying to make as little noise as possible. But the natives who erupted from the tunnel at the base of the cliff were completely noiseless on their broad, bare feet and, without having a chance to use their weapons, to utter more than a strangled shout, the three Terrans went down under a wave of evil-smelling, furry bodies.

Grimes recovered slowly. Something hard had hit him behind the right ear, and he was suffering from a splitting headache. He was, he realized, propped in a sitting posture, his back against a wall of some kind. No, not a wall—a bulkhead. The deck under his buttocks had a gentle rolling motion, and—his head was throbbing in synchronization—there was the steady *chunk, chunk, chunk* of a paddle wheel. Grimes tried to lift his hands to his aching head, discovered that his wrists were bound. So were his ankles.

He heard a familiar voice. "You and your bloody boats!"

He opened his eyes. He turned his head, saw that Sonya was propped up beside him. Her face, in the light of the flickering oil lamp, was pale and drawn. She muttered sardonically, "Welcome aboard, Commodore." Beyond her was Farrell, trussed as were the other two. Nonetheless, he was able to say severely, "This is no time for humor, Commander Verrill."

"But it is, James," she told him sweetly.

"What . . . what happened?" asked Grimes.

"We were jumped, that's what. It seems that a bunch of the loyalists—quote and unquote—suffered a change of

mind. They'd sooner take their chances with the rebels than on some strange and terrifying planet . . ."

"Better the devil you know . . ." said Grimes.

"Precisely."

"But where do *we* come in?" asked the Commodore.

"They had to stop us from stopping them from making their getaway," explained Farrell, as though to a mentally retarded child.

"There's more to it than that, James," Sonya told him. "There's a radio telephone of some kind in the compartment forward of this. Battery powered, I suppose. Not that it matters. Our friends have been arranging a rendezvous with a rebel patrol craft. They've made it plain that they're willing to buy their freedom, their lives. And the price is . . ."

"Us," completed Grimes. "What's the current market value of a full Commander in the Survey Service these days, Farrell? I've no doubt that the rebels will wish to show a profit on the deal."

"And how many laser cannon, complete with instruction manuals, is the Confederacy willing to pay for you, Commodore?" asked Commander Farrell.

"Shut up!" snapped Sonya.

The cabin was silent again, save for the creaking of timbers, the faint thudding of the engines, the *chunk, chunk, chunk* of the paddle. And then, audible in spite of the intervening bulkhead, there was the high-pitched gibbering, in bursts, that, in spite of the strange language, carried the sense of "*over*," "*roger*" and all the rest of the standard radio telephone procedure.

Sonya whispered, "As far as I can gather, hearing only one end of the conversation, the patrol craft has sighted this tub that we're in. We've been told to heave to, to await the boarding party . . ." As she spoke, the engines and the paddle wheel slowed, stopped.

There was comparative silence again. Grimes strained his ears for the noise of an approaching stern-wheeler, but in vain. There was, he realized, a new mechanical sound, but it came from overhead. Then it, too, ceased. He was about to speak when there was a loud *thud* from the deck outside, another, and another . . . There was an outbreak of excited gibbering. Shockingly, there were screams, almost human, and three startlingly loud reports.

Abruptly the cabin door slammed open. Two Esquelians



came in. There was dark, glistening blood on the fur of one of them, but it did not seem to be his own. They grabbed Grimes by the upper arms, dragged him roughly out on deck, jarring his lower spine painfully on the low sill of the door. They left him there, went back in for Sonya, and then Farrell.

Grimes lay where they had dropped him, looking upward. There were lights there, dim, but bright against the black sky, the sparse, faint stars. As his eyes grew accustomed to the darkness he could make out the great, baggy shape of the dirigible balloon, the comparative rigidity of the gondola slung under it. While he was trying to distinguish more details a rope was slipped about his body and he was hoisted aloft, like a sack of potatoes, by a creakingly complaining hand winch.

"And what now, Commodore? What now?" asked Farrell. By his tone of voice he implied, *You've been in far more irregular situations than me . . .*

Grimes chuckled. "To begin with, we thank all the odd gods of the galaxy that real life so very often copies fiction . . ."

Sonya snarled, "What the hell are you nattering about?"

Grimes chuckled again. "How often, in thrillers, have the baddies tied up the goodies and then carelessly left them with something sharp or abrasive to rub their bonds against . . . ?"

"You aren't kidding?" she asked. Then—"And since when have you been a goodie?"

"You'd be surprised . . ." Grimes swore then, briefly and vividly. The sharp edge in the wickerwork of which the airship's car was constructed had nicked his wrist quite painfully. He grunted, "But in fiction it's usually much easier . . ."

He worked on, sawing away with his bound hands, even though his wrists were slippery with blood. He was afraid that one of the airship's crew would come into the cabin to look at the prisoners, but the four Esquelians in the control room at the forward end of the gondola seemed fully occupied with navigation and, presumably, the two who were aft were devoting all their time to the engine of the thing.

Hell! That rope was tough—tougher than the edge against which he was rubbing it, tougher than his skin. Not being able to see what he was doing made it worse. He began

to wonder if the first result that he would achieve would be the slitting of an artery. He had never heard of that happening to a fictional hero; but there has to be a first time for everything. Sonya whispered, very real concern in her voice, "John! You're only hurting yourself! Stop it, before you do yourself some real damage!"

"It's dogged as does it!" he replied.

"John! It's not as though they're going to kill us. We're more value to them alive than dead!"

"Could be," he admitted. "But I've heard too many stories about samples from the bodies of kidnap victims being sent to their potential ransomers to speed up negotiations. Our furry friends strike me as being just the kind of businessmen who'd stoop to such a practice!"

"After the way in which they slaughtered the crew of the steamboat," put in Farrell, "I'm inclined to agree with the Commadore."

"The vote is two against one," said Grimes. And then the rope parted.

He brought his hands slowly round in front of him. There was a lamp in the cabin, a dim, incandescent bulb, and by its feeble light he could see that his wrists were in a mess. But the blood was dripping slowly, not spurting. He was in no immediate danger of bleeding to death. And he could work his fingers, although it seemed a long time before repeated flexings and wriggings rendered them capable of use.

He started on the rope about his ankles then. He muttered something about Chinese bowlines, Portuguese pig knots and unseamanlike bastards in general. He complained, "I can't find an end to work on." Then, with an attempt at humor, "Somebody must have cut it off!"

"Talking of cutting . . ." Sonya's voice had a sharp edge to it. "Talking of cutting, if you can get your paws on to the heel of one of my shoes . . ."

*Yes, of course*, thought Grimes. Sonya was in uniform, and the uniform of a Survey Service officer contained quite a few concealed weapons. Sophisticated captors would soon have found these, but the Esquelians, to whom clothing was strange, had yet to learn the strange uses to which it could be put. Without overmuch contortion Grimes was able to get his hand around the heel of his wife's left shoe. He twisted, pulled—and was armed with a short but useful

knife. To slash through his remaining bonds was a matter of seconds.

The Esquelian came through into the cabin from forward just as Grimes was getting shakily to his feet. He was wearing a belt, and from this belt depended a holster. He was quick neither on the draw nor the uptake, but the Commodore was half crippled by impeded circulation to his ankles and feet. The native got his pistol—a clumsy revolver—out before Grimes was on him. He fired two shots, each of them too close for comfort, one of them almost parting the Commodore's close-cropped hair.

Grimes's intention—he told himself afterward—had been to disable only, to disarm. It was unfortunate, perhaps, that the airship at that moment dived steeply. The Earthman plunged forward in a staggering run, the knife held before him, stabbing deep into the furry chest. The Esquelian screamed shrilly as a disgustingly warm fluid gushed from his body over Grimes's hands, tumbled to the deck. As he fell, Grimes snatched the pistol. He was more at home with firearms than with bladed weapons.

Surprisingly it fitted his hand as though made for him—but there is parallel evolution of artifacts as well as of life forms. Holding it, almost stumbling over the body of the dead native, Grimes continued his forward progress, coming into the control cabin. It was light in there, wide windows admitting the morning twilight. Gibbering, the three Esquelians deserted their controls. One of them had a pistol, the other two snatched knives from a handy rack. Grimes fired, coldly and deliberately. The one with the revolver was his first target, then the nearer of the knife wielders, then his mate. At this range, even with an unfamiliar weapon with a stiff action, a man who in his younger days had been a small arms specialist could hardly miss. Grimes did not, even though he had to shoot one of the airmen twice, even though the last convulsive stab of a broad-bladed knife missed his foot by a millimeter.

He did not know whether or not the gun that he had been using was empty; he did not bother to check. Stooping, he quickly snatched up the one dropped by the dead pilot. It had never been fired. He turned, ran back into the cabin. He was just in time. One of the engineers was just about to bring a heavy spanner crashing down on Sonya's head but

was thrown back by the heavy slug that smashed his own skull.

Saying nothing, Grimes carried on aft. The other engineer was dead already, killed by the first wild shot of the encounter. Grimes thought at first that the loud dripping noise was being made by his blood. But it was not. It came from the fuel tank, which had been pierced by a stray bullet. Before Grimes could do anything about it, the steam turbine ground to a halt.

The sun was up. It was a fine morning, calm insofar as those in the disabled airship were concerned, although the whitecaps on the sea were evidence of a strong breeze. To port was the coastline: rugged cliffs, orange beaches, blue green vegetation inland, a sizable city far to the south'ard. It was receding quite rapidly as the aircraft, broadside on to the offshore wind, scudded to leeward.

The bodies of the airmen had been dragged into the cabin in which the Terrans had been imprisoned. Farrell and Sonya had wanted to throw them overside, but Grimes had talked them out of it. From his historical researches he knew something—not much, but something—about the handling of lighter-than-air flying machines. Until he had familiarized himself with the controls of this brute, he had no intention of dumping ballast.

He had succeeded in fixing the ship's position. In the control room there was a binnacle, and there were sight vanes on the compass. There were charts, and presumably the one that had been in use at the time of the escape was the one that covered this section of coast. The compass was strange; it was divided into 400 degrees, not 360. The latitude and longitude divisions on the chart were strange, too, but it wasn't hard to work out that the Esquelians worked on 100 minutes to a degree, 100 degrees to a right angle. There was a certain lack of logic involved—human beings, with their five-fingered hands, have a passion for reckoning things in twelves. The Esquelians, six-fingered, seemed to prefer reckoning by tens. Even so, compass, sight vanes and charts were a fine example of the parallel evolution of artifacts.

There was the compass rose, showing the variation (Grimes assumed) between True North and Magnetic North. There was that city to the south. There were two prominent moun-

tain peaks, the mountains being shown by what were obviously contour lines. Grimes laid off his cross bearings, using a roller, ruler and a crayon. The cocked hat was a very small one. After fifteen minutes he did it again. The line between the two fixes coincided with the estimated wind direction. And where would that take them?

Transferring the position to a small scale chart presented no problems. Neither did extending the course line. The only trouble was that it missed the fly speck that represented Drarg Island by at least twenty miles, regarding one minute on the latitude scale as being a mile. Sonya, recruited in her linguistic capacity, confirmed that the (to Grimes) meaningless squiggles alongside the dot on the chart did translate to "Drarg."

The trouble was that the unlucky shot that had immobilized the airship's engines had also immobilized her generator. There were batteries—but they were flat. (During a revolution quite important matters tend to be neglected.) The radio telephone was, in consequence, quite useless. Had there been power it would have been possible to raise the party on the island, to get them to send the pinnacle to pick them up when the aircraft was ditched, or, even, to tow them in.

"At least we're drifting away from the land," said Farrell, looking on the bright side. "I don't think that we should be too popular if we came down ashore." He added, rather petulantly, "Apart from anything else, my orders were that there was to be no intervention . . ." He implied that all the killing had been quite unnecessary.

"Self-defense," Grimes told him. "Not intervention. But if you ever make it back to Lindisfarne Base, James, you can tell the Admiral that it was the wicked Rim Worlders who played hell with a big stick."

"We're all in this, Commodore," said Farrell stiffly. "And this expedition is under *my* command, after all."

"This is no time for inessentials," snapped Sonya. She straightened up from the chart, which she had been studying. "As I see it, they'll sight us from the island, and assume that we're just one of the rebel patrol craft. They might try to intercept us, trying to find out what's happened to us. On the other hand . . ."

"On the other hand," contributed Farrell, "my bright Exec

does everything by the book. He'll insist on getting direct orders from Lindisfarne before he does *anything*."

"How does this thing work?" asked Sonya. "Can you *do* anything, John? The way that you were talking earlier you conveyed the impression that you knew something about airships."

Grimes prowled through the control compartment like a big cat in a small cupboard. He complained, "If I had power, I could get someplace. This wheel here, abaft the binnacle, is obviously for steering. This other wheel, with what looks like a crude altimeter above it, will be for the altitude coxswain. The first actuates a vertical steering surface, the rudder. The second actuates the horizontal control surfaces, for aerodynamic lift . . ."

"I thought that in an airship you dumped ballast or valved gas if you wanted to go up or down," said Sonya.

"You can do that, too." Grimes indicated toggled cords that ran down into the control room from above. "These, I *think*, open valves if you pull them. So we can come down." He added grimly, "And we've plenty of ballast to throw out if we want to get upstairs in a hurry."

"Then what's all the bellyaching about?" asked Farrell. "We can control our altitude by either of two ways, and we can steer. If the rudder's not working we can soon fix it."

Grimes looked at him coldly. "Commander Farrell," he said at last, "there is one helluva difference between a free balloon and a dirigible balloon. This brute, with no propulsive power, is a free balloon." He paused while he sought for and found an analogy. "She's like a surface ship, broken down, drifting wherever wind and current take her. The surface ship is part of the current if she has neither sails nor engines. A balloon is part of the wind. We can wiggle our rudder as much as we like and it will have no effect whatsoever . . ." Once again he tried to find a seamanlike analogy—and found something more important. He whispered, "Riverhead . . ."

"*Riverhead?*" echoed Farrell. "What's that, Commodore?"

"Shut up, James," murmured Sonya. "Let the man think."

Grimes was thinking, and remembering. During his spell of command of *Sonya Winneck*, on *Aquarius*, he had been faced with an occasional knotty problem. One such had been the delivery of a consignment of earth-moving machinery to Riverhead, a new port miles inland—equipment

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which was to be used for the excavation of a swinging basin off the wharfage. The channel was deep enough—but at its upper end it was not as wide as *Sonya Winneck* was long. However, everything had been arranged nicely. Grimes was to come alongside, discharge his cargo and then, with the aid of a tug, proceed stern first down river until he had room to swing in Carradine's Reach. Unfortunately the tug had suffered a major breakdown so that *Sonya Winneck*, if she waited for the repairs to be completed, would be at least ten days, idle, alongside at the new wharf.

Grimes had decided not to wait and had successfully dredged down river on the ebb.

He said slowly, "Yes, I think we could dredge . . ."

"Dredge?" asked Farrell.

Grimes decided that he would explain. People obey orders much more cheerfully when they know that what they are being told to do makes sense. He said, "Yes, I've done it before, but in a surface ship. I had to proceed five miles down a narrow channel, stern first . . ."

"But you had engines?"

"Yes, I had engines, but I didn't use them. I couldn't use them. Very few surface ships, only specialized vessels, will steer when going astern. The rudder, you see, must be in the screw race. You must have that motion of water past and around the rudder from forward to aft . . .

"The dredging technique is simple enough. You put an anchor on the bottom, not enough chain out so that it holds, but just enough so that it acts as a drag, keeping your head up into the current. You're still drifting *with* the current, of course, but not as fast. So the water is sliding past your rudder in the right direction, from forward, so you can steer after a fashion."

"It works?"

"Yes," said Sonya. "It works all right. But with all the ear bashing I got before and after I was inclined to think that John was the only man who'd ever made it work."

"You can do it here?" asked Farrell.

"I think so. It's worth trying."

The hand winch was aft, in the engine compartment. To dismount it would have taken too much time, so Grimes had the rope fall run off it, brought forward and coiled down in the control room. To its end he made fast four large

canvas buckets; what they had been used for he did not know, nor ever did know, but they formed an ideal drogue. Farrell, using the spanner that had been the dead engineer's weapon, smashed outward the forward window. It was glass, and not heavy enough to offer much resistance. Grimes told him to make sure that there were no jagged pieces left on the sill to cut the dragline. Then, carefully, he lowered his cluster of buckets down toward the water. The line was not long enough to reach.

Carefully Grimes belayed it to the base of the binnacle, which fitting seemed to be securely mounted. He went back forward, looked out and down. He called back, over his shoulder, "We have to valve gas . . ."

"Which control?" asked Sonya.

"Oh, the middle one, I suppose . . ."

That made sense, he thought. One of the others might have an effect on the airship's trim, or give it a heavy list to port or starboard. *And so*, he told himself, *might this one*.

He was aware of a hissing noise coming from overhead. The airship was dropping rapidly, too rapidly. "That will do!" he ordered sharply.

"The bloody thing's stuck!" he heard Sonya call. Then, "I've got it clear!"

The airship was still falling, and the drogue made its first contact with the waves—close now, too close below—skipping over them. The line tightened with a jerk and the flimsy structure of the gondola creaked in protest. The ship came round head to wind, and an icy gale swept through the broken window. The ship bounced upward and there was a brief period of relative calm, sagged, and once again was subjected to the atmospheric turbulence.

"Ballast!" gasped Grimes, clinging desperately to the sill. It seemed a long time before anything happened, and then the ship soared, lifting the drogue well clear of the water.

"Got rid . . . of one . . . of our late friends . . ." gasped Farrell.

"Justifiable, in the circumstances," conceded Grimes grudgingly. "But before we go any further we have to rig a windscreen . . . I saw some canvas, or what looks like canvas, aft . . ."

"How will you keep a lookout?" asked Farrell.

"The lookout will be kept astern, from the engine compart-



ment. That's the way that we shall be going. Now give me a hand to get this hole plugged."

They got the canvas over the empty window frame, lashed it and, with a hammer and nails from the engineroom tool kit, tacked it into place. Grimes hoped that it would hold. He discovered that he could see the surface of the sea quite well from the side windows, so had no worries on that score. Before doing anything else he retrieved the crumpled chart from the corner into which it had blown, spread it out on the desk, made an estimation of the drift since the last observed position, laid off a course for Drarg Island. Once he had the ship under control he would steer a reciprocal of this course, send Sonya right aft to keep a lookout astern, with Farrell stationed amidships to relay information and orders. First of all, however, there was more juggling to be done with gas and ballast.

Grimes descended cautiously, calling instructions to Sonya as he watched the white-crested waves coming up to meet him. The drogue touched surface—and still the ship fell, jerkily, until the buckets bit and held, sinking as they filled. There was a vile draft in the control room as the wind whistled through chinks in the makeshift windshield.

"All right," ordered Grimes. "Man the lookout!"

The others scrambled aft, while the Commodore took the wheel. He knew that he would have to keep the lubber's line steady on a figure that looked like a misshapen, convoluted 7, saw that the ship's head was all of twenty degrees to starboard off this heading. He applied port rudder, was surprised as well as pleased when she came round easily. He risked a sidewise glance at the altimeter. The needle was steady enough—but it could not possibly drop much lower. The instrument had not been designed for wave hopping.

He yelled, hoping that Farrell would be able to hear him, "If you think we're getting too low, dump some more ballast!"

"Will do!" came the reply.

He concentrated on his steering. It was not as easy as he thought it would be. Now and again he had taken the wheel of *Sonya Winneck*, just to get the feel of her—but *her* wheel could be put over with one finger, all the real work being done by the powerful steering motors aft. Here it was a case of Armstrong Patent.

But he kept the lubber's line on the course, his arms aching, his legs trembling, his clothing soaked with perspira-

tion in spite of the freezing draft. He wished that he knew what speed the airship was making. He wanted a drink, badly, and thought longingly of ice-cold water. He wanted a smoke, and was tempted. He thought that the airship was helium filled, was almost certain that she was helium filled, but dared take no risks. But the stem of his cold, empty pipe between his teeth was some small comfort.

Faintly he heard Sonya call out something.

Farrell echoed her. "Land, ho!"

"Where away?" yelled Grimes over his shoulder, his pipe clattering unheeded to the deck.

"Astern! To port! About fifteen degrees!"

Carefully, Grimes brought the ship round to the new course. She held it, almost without attention on his part. There must, he thought, have been a shift of wind.

"As she goes!" came the hail. "Steady as she goes!"

"Steady," grunted Grimes. "Steady . . ."

*How much longer?* He concentrated on his steering, on the swaying compass card, on the outlandish numerals that seemed to writhe as he watched them. *How much longer?*

He heard Sonya scream, "We're coming in fast! Too low! The cliffs!"

"Ballast!" yelled Grimes.

Farrell had not waited for the order, already had the trap in the cabin deck open, was pushing out another of the dead Esquelians, then another. The deck lifted under Grimes's feet, lifted and tilted, throwing him forward onto his now useless wheel. A violent jerk flung him aft, breaking his grip on the spokes.

After what seemed a very long time he tried to get to his feet. Suddenly Sonya was with him, helping him up, supporting him in his uphill scramble toward the stern of the ship, over decking that canted and swayed uneasily. They stumbled over the dead bodies, skirting the open hatch. Grimes was surprised to see bare rock only a foot or so below the aperture. They came to the engineroom, jumped down through the door to the ground. It was only a short drop.

"We were lucky," said Grimes, assessing the situation. The airship had barely cleared the cliff edge, had been brought up short by its dragline a few feet short of the Carlotti beacon.

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"Bloody lucky!" Farrell said. "Some Execs would have opened fire first and waited for orders afterward . . ."

His Executive Officer flushed. "Well, sir, I thought it might be you." He added, tactlessly, "After all, we've heard so many stories about Commodore Grimes . . ."

Farrell was generous. He said, "Excellent airmanship, Commodore."

"Seamanship," corrected Grimes huffily.

Sonya laughed—but it was with him, not at him.

The voyage between Esquel and Tallis, where the King and his entourage were disembarked, was not a pleasant one. Insofar as the Terrans were concerned, the Esquelians stank. Insofar as the Esquelians were concerned, the Terrans stank—and that verb could be used both literally and metaphorically. Commander Farrell thought, oddly enough, that the King should be humbly grateful. The King, not so oddly, was of the opinion that he had been let down, badly, by his allies. Grimes, on one occasion when he allowed himself to be drawn into an argument, made himself unpopular with both sides by saying that the universe would be a far happier place if people did not permit political expediency to influence their choice of friends.

But at last, and none too soon, *Star Pioneer* dropped gently down to her berth between the marker beacons at Tallisport, and the ramp was extended, and, gibbering dejectedly, the Esquelians filed down it to be received by the Terran High Commissioner.

Farrell, watching from a control room viewport, turned to Grimes and Sonya. He said thankfully, "My first order will be 'Clean ship.' And there'll be no shore leave for anybody until it's done."

"And don't economize on the disinfectant, Jimmy," Sonya told him.

## THE RUB

**SLOWLY GRIMES AWAKENED** from his nightmare.

It had been so real, too real, and the worst part of it was always the deep sense of loss. There was that shocking contrast between the dreary life that he was living (in the dream) and the rich and full life that he somehow knew that he should be living. There was his wife—that drab, unimaginative woman with her irritating mannerisms—and that memory of somebody else, somebody whom he had never met, never would meet, somebody elegant and slim, somebody with whom he had far more in common than just the physical side of marriage, somebody who knew books and music and the visual arts and yet evinced a deep appreciation of the peculiar psychology of the spaceman.

Slowly Grimes awakened.

Slowly he realized that he was not in his bedroom in the Base Commander's quarters on Zetland. He listened to the small, comforting noises: the irregular throbbing of the inertial drive, the sobbing of pumps, the soughing of the ventilation system, the thin, high whine of the Mannschenn Drive unit. And there was the soft, steady breathing of the woman in the bed with him. (That other one snored.)

But—such was the impression that his dream had made upon him—he had to be sure. (All cats are gray in the dark.) Without too much fumbling he found the stud of the light switch on his side of the bed. His reading lamp came on. Its light was soft, subdued—but it was enough to wake Sonya.

She looked up at him irritably, her lean face framed by the auburn hair that somehow retained its neatness, its sleekness, even after sleep. She demanded sharply, "What is it, John?"

He said, "I'm sorry. Sorry I woke you, that is. But I had to be sure."

Her face and voice immediately softened. "That dream of yours again?"

"Yes. The worst part of it is knowing that *you* are somewhere, somewhen, but that I shall never meet you."

"But you did." She laughed with him, not at him. "And that's your bad luck."

"My good luck," he corrected.

"Our good luck."

"I suppose that we could have done worse . . ." he admitted.

Grimes was awakened again by the soft chiming of the alarm. From his side of the bed he could reach the service hatch in the bulkhead. He opened it, revealing the tray with its silver coffee service.

"The usual?" he asked Sonya, who was making a lazy attempt to sit up in bed.

"Yes, John. You should know by this time."

Grimes poured a cup for his wife—black, unsweetened—then one for himself. He liked sugar, rather too much of it, and cream.

"I shall be rather sorry when this voyage is over," said Sonya. "Jimmy is doing us well. We shouldn't be pampered like this in an *Alpha Class* liner."

"After all, I am a Commodore," said Grimes smugly.

"Not in the Survey Service, you aren't," Sonya told him.

*In that dream, that recurring nightmare, Grimes was still an officer in the Federation's Survey Service. But he had never gotten past Commander, and never would. He was passing his days, and would end his days, as commanding officer of an unimportant base on a world that somebody had once described as a planetwide lower middle class suburb.*

"Perhaps not," Grimes admitted, "but I pile on enough Gees to be accorded V.I.P. treatment aboard a Survey Service ship."

"You do? I was under the impression that it was because of me that Jimmy let us have the V.I.P. suite."

"Not you. You're only a mere Commander, and on the Reserve list at that."

"Don't be so bloody rank conscious!"

She took a swipe at him with her pillow. Grimes cursed as hot coffee splashed onto his bare chest. Then, "I don't know what your precious Jimmy will think when he sees the mess on the sheets."

"He'll not see it—and his laundrobot won't worry about it. Pour yourself some more coffee, and I'll use the bathroom while you're drinking it." Then, as she slid out of the bed, "And go easy on the sugar. You're getting a paunch . . ."

Grimes remembered the fat and slovenly Commander of Zetland Base.

Commander James Farrell, the Captain of *Star Pioneer*, prided himself on running a taut ship. Attendance at every meal was mandatory for his officers. As he and Sonya took their seats at the captain's table, Grimes wondered how Farrell would cope with the reluctance of middle watch keepers aboard merchant vessels to appear at breakfast.

All of *Star Pioneer's* officers were here, in their places, except for those actually on duty. Smartly uniformed messgirls circulated among the tables, taking orders, bringing dishes. Farrell sat, of course, at the head of his own table, with Sonya to his right and Grimes to his left. At the foot of the table was Lieutenant Commander Malleson, the Senior Engineering Officer. There was little to distinguish him from his captain but the badges of rank. There was little to distinguish any of the officers one from the other. They were all tall young men, all with close-cropped hair, all with standardized good looks, each and every one of them a refugee from a Survey Service recruiting poster. *In my young days*, thought Grimes, *there was room for individuality . . .* He smiled to himself. *And where did it get me? Oh you bloody tee, that's where.*

"What's the joke, John?" asked Sonya. "Share it, please."

Grimes's prominent ears reddened. "Just a thought, dear." He was saved by a messgirl, who presented the menu to him. "Nathia juice, please. Ham and eggs—sunny-side up—to follow, with just a hint of French fries. And coffee."

"You keep a good table, Jimmy," Sonya said to Farrell. Then, looking at her husband, "Rather too good, perhaps."

"I'm afraid, Sonya," Farrell told her, "that our meals from now on will be rather lacking in variety. It seems that our Esquelian passengers brought some local virus aboard with 'em. The biologists in the first survey expeditions found nothing at all on Esquel in any way dangerous to human life, so perhaps we didn't take the precautions we should have done when we embarked the King and his followers. Even so, while they were on board their excretory matter was excluded from the ship's closed ecology. But after they were disembarked on Tallis the plumbing wasn't properly disinfected . . ."

## ALTERNATE ORBITS

*Not a very suitable topic of conversation for the breakfast table,* thought Grimes, sipping his fruit juice.

"So?" asked Sonya interestedly.

"So there's been a plague running its course in the 'farm.' It's just been the tissue culture vats that have been affected, luckily. We could make do indefinitely on yeasts and algae—but who wants to?" He grinned at Grimes, who was lifting a forkload of yolk-coated ham to his mouth. "Who wants to?"

"Not me, Captain," admitted Grimes.

"Or me, Commodore. The beef's dead, and the pork, and the chicken. The quack says that the lamb's not fit for human consumption. So far the mutton seems to be unaffected, but we can't even be sure of that."

"You'll be able to stock up when we get to Port Forlorn," said Grimes.

"That's a long way off." Farrell looked steadily at Grimes as he buttered a piece of toast. "I've a job for you, Commodore."

"A job for *me*, Commander Farrell?"

"Yes, you, Commodore Grimes. By virtue of your rank you represent the Rim Worlds Confederacy aboard this vessel. Kinsolving's Planet, although no longer colonized, is one of the Rim Worlds. I want to put down there."

"Why?" asked Grimes.

"Correct me if I'm wrong, Commodore, but I understand that the original settlers introduced Earth-type flora and fauna, some of which have not only survived, but flourished. It's not the flora that I'm interested in, of course—but I've heard that there are the descendants of the original rabbits, pigs, cattle and hens running wild there."

"No cattle," Grimes told him. "And no hens. Probably the pigs did for 'em before they could become established."

"Rabbit's a good substitute for chicken," said Farrell.

"Jimmy," reproved Sonya, "I do believe that you like your tummy."

"I do, Sonya, I do," said the young man.

"And so do I," said Lieutenant Commander Malleson, who until now had been eating in dedicated silence.

"But I don't like Kinsolving," grumbled Grimes. "And, in any case, we shall have to get permission to land."

"You will get it, John," said Sonya firmly.

Later that ship's morning, Farrell discussed the proposed landing on Kinsolving with Grimes and Sonya.

"Frankly," he told them, "I'm glad of an excuse to visit the planet. Not so long ago the Survey Service released a report on the three expeditions, starting off with that odd wet paint affair . . ."

"That was over a hundred and fifty years ago," said Grimes.

"Yes. I know. And I know, too, that you've been twice to Kinsolving—the first time as an observer with the neo-Calvinists, the second time in command of your own show . . ."

"And both times," admitted Grimes, "I was scared. Badly."

"You don't frighten easily, Commodore, as well I know. But what actually did happen? The official reports that have been released to the likes of us don't give much away. It was hinted—no more, just hinted—that the neo-Calvinists tried to call up the God of the Old Testament, and raised the entire Greek pantheon instead. And you, sir, attempted to repeat the experiment, and got tangled with a Mephistopheles straight out of Gounod's *Faust*."

"Cutting extraneous cackle," said Grimes, "that's just what did happen."

"What I'm getting at, Commodore, is this. Were your experiences objective or subjective?"

"That first time, Commander, the neo-Calvinists' ship, *Piety*, was destroyed, as well as her pinnaces. Their leaders—the Presbyter, the Rector, the Deaconess and thirteen others, men and women—completely vanished. That was objective enough for anybody. The second time—I vanished."

"I can vouch for that," stated Sonya.

"But you came back. Obviously."

"More by luck than judgment." Grimes laughed, without humor. "When you do a deal with the Devil it's as well to read the small print."

"But at no time was there any actual physical harm to anybody."

"There could have been. And we don't know what happened to the neo-Calvinist boss cookies . . ."

"Probably being converted to hedonism on Mount Olympus," said Sonya.

"But we don't know."

Farrell grinned. "And aren't those very words a challenge



to any officer in the Survey Service? You used to be one of us yourself, sir, and Sonya is still on our Reserve list. Kinsolving is almost directly on the track from Tallis to Lorn. I have a perfectly valid excuse to make a landing. And even in these decadent days . . ." He grinned again at the Commodore . . . "my Lords Commissioners do not discourage initiative and zeal on the part of their captains."

Reluctantly, Grimes grinned back. It was becoming evident that Farrell possessed depths of character not apparent on first acquaintance. True, he worked by the book—and had Grimes done so he would have risen to the rank of Admiral in the Survey Service—but he was also capable of reading between the lines. A deviation from his original cruise pattern—the evacuation of the King and his supporters from Esquel—had brought him to within easy reach of Kinsolving; he was making the most of the new circumstances. Fleetinglly Grimes wondered if the destruction of the ship's fresh meat supply had been intentional rather than accidental, but dismissed the thought. Not even he, Grimes, had ever done a thing like that.

"Later," said Farrell, "if it's all right with you, sir, we'll go over the official reports, and you can fill in the gaps. But what is it that makes Kinsolving the way it is?"

"Your guess is as good as anybody's, Commander. It's just that the atmosphere is . . . odd. Psychologically odd, not chemically or physically. A terrifying queerness. A sense of impending doom . . . Kinsolving was settled at the same time as the other Rim Worlds. Physically speaking, it's a far more desirable piece of real estate than any of them. But the colonists lost heart. Their suicide rate rose to an abnormal level. Their mental institutions were soon overcrowded. And so on. So they pulled out.

"The reason for it all? There have been many theories. One of the latest is that the Kinsolving system lies at some intersection of . . . of stress lines. Stress lines in *what*? Don't ask me. But the very fabric of the continuum is thin, ragged, and the dividing lines between *then* and *now*, *here* and *there*, *what is* and *what might be* are virtually nonexistent . . ."

"Quite a place," commented Farrell. "But you're willing to visit it a third time, sir?"

"Yes," agreed Grimes after a long pause. "But I'm not prepared to make a third attempt at awakening ancient

deities from their well-earned rest. In any case, we lack the . . . I suppose you could call her the medium. She's on Lorn, and even if she were here I doubt if she'd play."

"Good. I'll adjust trajectory for Kinsolving, and then we'll send Carlottigrams to our respective lords and masters requesting permission to land. I don't think that they'll turn it down."

"Unfortunately," said Grimes, but the faint smile that lightened his craggy features belied the word.

Slowly, cautiously Farrell eased *Star Pioneer* down to the sunlit hemisphere of Kinsolving, to a position a little to the west of the morning terminator. Grimes had advised a landing at the site used by the Confederacy's *Rim Sword* and, later, by his own *Faraway Quest*. The destruction of the neo-Calvinists' *Piety* had made the spaceport unusable. This landing place was hard by the deserted city of Enderston, on the shore of the Darkling Tarn. It had been the Sports Stadium.

Conditions were ideal for the landing. The sounding rockets, fired when the ship was descending through the first tenuous fringes of the atmosphere, had revealed a remarkable absence of turbulence. The parachute flares discharged by them at varying altitudes were falling straight down, each trailing its long, unwavering streamer of white smoke.

Grimes and Sonya were in the control room. "There's Enderston," the Commodore said, "on the east bank of the Weary River. We can't see much from this altitude; everything's overgrown. That's the Darkling Tarn . . ." With a ruler that he had picked up he pointed to the amoebalike glimmer of water among the dull green that now was showing up clearly on the big approach screen. "You can't miss it. That fairly well-defined oval of paler green is the Stadium . . ."

The inertial drive throbbed more loudly as Farrell made minor adjustments and then, when the Stadium was in the exact center of the screen, settled down again to its almost inaudible muttering.

At Farrell's curt order they all went to their acceleration chairs, strapped themselves in. Grimes, with the others, watched the expanding picture on the screen. It was all so familiar, too familiar, even to the minor brush fire started

by the last of the parachute flares. And, as on the previous two occasions, there was the feeling that supernatural forces were mustering to resist the landing of the ship, to destroy her and all aboard her.

He looked at Farrell. The young Captain's face was pale, strained—and this, after all, was a setting down in almost ideal conditions. There were not, it is true, any ground approach aids. But neither was there wind, or cloud, or clear air turbulence. And Survey Service officers were trained to bring their ships down on worlds with no spaceport facilities.

So Farrell was feeling it too. The knowledge made Grimes less unhappy. *Now you begin to know what it's like, Jimmy boy*, he thought smugly.

But she was down at last.

There was almost no shock at all, and only an almost inaudible complaint from the ship's structure, and a faint sighing of shock absorbers as the great mass of the vessel settled in the cradle of her tripodal landing gear. She was down. "Secure main engines," ordered Farrell at last. Telegraph bells jangled sharply, and the inertial drive generators muttered to themselves and then were still. She was down, and the silence was intensified by the soft soughing of the ventilation fans.

Grimes swiveled in his chair, gazed out through the viewport toward the distant mountain peak, the black, truncated cone hard and sharp against the pale blue sky. "Sinai," Presbyterian Cannon had named it. "Olympus," Grimes had labeled it on his new charts of the planetary surface. But that name was no longer apt. On its summit the neo-Calvinists had attempted to invoke Jehovah—and Zeus had answered their call. On its summit Grimes had tried to invoke the gods of the Greek pantheon—and had been snatched into an oddly peopled Limbo by Mephistopheles himself.

This time on Kinsolving the Commodore was going to be cautious. Wild horses—assuming that there were any on this planet, and assuming that they should be possessed by such a strange ambition—would not be able to drag him up to the top of the mountain.

Nonetheless, Grimes did revisit the mountaintop, taken there by the tamed horsepower of *Star Pioneer's* pinnace rather than by wild horses. Nothing happened. Nothing could happen unless Clarisse, descendant of the long dead

artist-magicians, was there to make it happen. There was nothing to see, except the view. All that remained of the two disastrous experiments was a weathered spattering of pigments where the witch girl's easel had stood.

Everybody visited the famous caves, of course, and stared at and photographed the rock paintings, the startlingly life-like depiction of beasts and their hunters. And the paint was dry, and the paintings were old, old, even though some faint hint of their original magic still lingered.

Even so, this was an uneasy world. Men and women never walked alone, were always conscious of something lurking in the greenery, in the ruins. Farrell, reluctant as he was to break the Survey Service's uniform regulations, issued strict orders that everybody ashore on any business whatsoever was to wear a bright, scarlet jacket over his other clothing. This was after two hunting parties had opened fire upon each other; luckily nobody was killed, but four men and three women would be in the sick bay for days with bullet wounds.

Grimes said to Farrell, "Don't you think it's time that we were lifting ship, Captain?"

"Not for a while, Commodore. We have to be sure that the new tissue cultures will be successful."

"That's just an excuse."

"All right, it's just an excuse."

"You're waiting for something to happen."

"Yes. Damn it all, Commodore, this sensation of brooding menace is getting me down; it's getting all of us down. But I want to have something definite to report to my Lords Commissioners . . ."

"Don't pay too high a price for that fourth ring on your sleeve, James."

"It's more than promotion that's at stake, sir, although I shall welcome it. It's just that I hate being up against an enemy that I can't see, can't touch. It's just that I want to accomplish something. It's just that I don't want to go slink-ing off like a dog with his tail between his legs."

"The original colony did just that."

"But they . . ." Farrell stopped abruptly.

"I'll finish it for you, James. But they were only civilians. They weren't wearing the Survey Service badge on their caps, Survey Service braid on their sleeves or shoulders. They weren't disciplined. And how long do you think your

ship's discipline is going to stand up to the strain, gold braid and brass buttons notwithstanding?"

"For long enough."

Sonya broke in. "This is Jimmy's show, John. He makes the decisions. And I agree with him that we should stay on Kinsolving until we have something to show for our visit."

"Thank you, Sonya," said Farrell. Then, "You must excuse me. I have things to attend to."

When the young man had left their cabin, Sonya turned to her husband. "You're getting too old and cautious, John. Or are you sulking because *you're* not running things?"

"I don't like this world, my dear. I've reasons not to."

"You're letting it get you down. You look as though you haven't slept for a week."

"I haven't. Not to speak of."

"Why didn't you let me know?"

"It's so damned silly. It's that bloody nightmare of mine—you know the one. Every time I shut my eyes it recurs."

"You should have told me."

"I should have done." He got slowly to his feet. "Probably some good, healthy exercise will make me sleep better. A long walk . . ."

"I'll come with you."

She fetched from the wardrobe the scarlet jackets that they had been given. Grimes took from a drawer his deadly little Minetti, put it in one pocket, a spare clip of cartridges in the other. Heavier handguns and miniaturized transceivers they would collect from the duty officer at the airlock.

Within a few minutes they were walking down the ramp to the path that had been hacked and burned and trodden through the encroaching greenery, the trail that led to the ruined city.

It was early afternoon. The sun was still high in the pale sky, but the breeze, what there was of it, was chilly. And the shadows, surely, were darker here than on any other world that Grimes had ever visited, and seemed to possess a life of their own. But that was only imagination.

They walked steadily but carefully, watching where they put their feet, avoiding the vines and brambles that seemed deliberately to try to trip them. On either side of the rough track the vegetation was locked in silent, bitter warfare: indigenous trees and shrubs, importations from Earth and

other worlds, and parasites upon parasites. In spite of the overly luxuriant growth the overwhelming impression was of death rather than of life, and the most readily identifiable scent on the chill air was that of decay.

They came to the outskirts of the city, picking their way over the tilted slabs of concrete, thrust up and aside by root and trunk, that had once been a road. Once the buildings between which it ran had been drably utilitarian; now the madly proliferating and destructive ivy clothed them in somber, Gothic splendor. An abandoned ground car, the glass of its headlights by some freak of circumstances unobscured, glared at them like a crouching, green-furred beast.

Grimes tried to imagine what this place had been like before its evacuation. Probably it had been very similar to any sizable town on Lorn or Faraway, Ultimo or Thule—architecturally. But there had been one difference, and a very important one. There had been the uncanny atmosphere, that omnipresent premonition of . . . Of . . . ? That fear of the cold and the dark, of the Ultimate Night. Other cities on other worlds had their haunted houses; here every house had been haunted.

He said, "The sooner young Farrell lifts ship off this deserted graveyard, the better."

"At least it's not raining," Sonya told him, with an attempt at cheerfulness.

"Thank the odd gods of the galaxy for one small mercy," grumbled Grimes.

"Talking of odd gods . . ." she said.

"What about them?"

"Sally Veerhausen, the Biochemist, told me that there's a very odd church on a side street that runs off the main drag."

"Oh?"

"Yes. It's to the right, and it's little more than an alley, and you turn into it just before you get to a tall tower with a latticework radio mast still standing on top of it . . ."

"That it there, to the right?"

"Must be. Shall we investigate?"

"What is there to investigate?" he asked.

"Nothing, probably. But I seem to recall a period when you exhibited a passion for what you referred to as freak religions. This could be one to add to your collection."

I doubt it," he told her.

But after a few minutes' careful walking they were turning

off the main street, making their way along an alley between walls overgrown with the ubiquitous ivy that had been brought to the world by some long dead, homesick colonist.

The church was there.

It was only a small building, a masonry cube with its angles somehow and subtly wrong. And it was different from its neighbors. Perhaps the stone, natural or synthetic, from which it had been constructed possessed some quality, physical or chemical, lacking in the building materials in more general use. Its dull gray facade was unmarked by creeper, lichen or moss. Its door, gray like the walls, but of metal, was uncorroded. Over the plain rectangle of the entrance were the embossed letters in some matte black substance—TEMPLE OF THE PRINCIPLE.

Grimes snorted almost inaudibly. Then, "What Principle?" he demanded. "There have been so many."

"Perhaps," said Sonya seriously, "the greatest and most mysterious one of all."

The Golden Way? The greatest, I admit . . ."

"No. Sally got her paws onto such records as still exist—the vaults in the city hall kept their contents quite intact—and found out that there was a cult here that worshipped, or tried to worship, the Uncertainty Principle . . ."

"Mphm. Could have been quite a suitable religion for this world. Inexplicable forces playing hell with anything and everything, so, if you can't lick 'em, join 'em."

"Or get the hell out."

"Or get the hell out. But—who knows?—this freak religion might just have worked. Shall we go inside?"

"Why not?"

The door opened easily, too easily. It was almost as though they had been expected. But this, Grimes told himself, was absurd thinking. The officers from the ship who had found this place must have oiled the hinges. And had they done something about the lighting system too? It should have been dark inside the huge, windowless room, but it was not. The gray, subtly shifting twilight was worse than darkness would have been. It accentuated the wrongness of the angles where wall met wall, ceiling and floor. It seemed to concentrate, in a formless blob of pallid luminescence, over the coffin-shaped altar that stood almost in the middle of the oddly lopsided hall. *Almost* in the middle . . . Its

positioning was in keeping with the rest of the warped geometrics of this place.

"I don't like it," said Grimes. "I don't like it at all."

"Neither do I," whispered Sonya.

Yet neither of them made any attempt to retreat to the comparative light and warmth and sanity of the alley outside.

"What rites did they practice?" whispered the Commodore. "What prayers did they chant? And to *what*?"

"I'd rather not find out."

But still they did not withdraw, still, hand in hand, they advanced slowly toward the black altar, the coffin-shaped . . . coffin-shaped? No. Its planes and angles shifted. It was more of a cube. It was more than a cube. It was . . .

Grimes, knew, suddenly, what it was. It was a tesseract. And he knew, too, that he should never have come again to this world. Twice he had visited Kinsolving before, and on the second occasion had become more deeply involved than on the first. Whatever the forces were that ruled this planet, he was becoming more and more attuned to them.

And this was the third time.

"John!" he heard Sonya's distant voice. "*John!*"

He tightened the grasp of his right hand, but the warmth of hers was no longer within it.

"John . . ."

It was no more than a fading whisper.

"John . . ."

"Grmph . . ." He didn't want to wake up. Full awareness would mean maximum appreciation of his nagging headache. His eyes were gummed shut, and he had the impression that small and noisome animals had fought and done other things inside his mouth.

"*John!*"

*Blast the woman*, he thought.

"*JOHN!*" She was shaking him now.

He flailed out blindly, felt one fist connect with something soft, heard a startled gasp of pain. "Never touch an officer," he enunciated thickly. "'Gainst regulations."

"You . . . You *hit* me. You brute."

"Own fault."

"Wake up, damn you!"

He got his eyes open somehow, stared blearily at the



plump, faded woman in the shabby robe who was staring down at him with distaste.

*Who are you?* he demanded silently. *Who are you?* The memory of someone slim, sleek and elegant persisted in his befuddled brain. Then—*Where am I? Who am I?*

"You've got a job to do," the woman told him in a voice that was an unpleasant whine. "You'd better get your stinking carcass out of that bed and start doing it. I like to go on eating, even if you don't."

*A starvation diet would do you the world of good,* he thought. He said, "Coffee."

"Coffee *what?* Where's your manners?"

"Coffee, please."

She left him then, and he rolled out of the rumpled bed. He looked down with distaste at his sagging drinker's paunch, then got to his feet and walked unsteadily to the bathroom. He was surprised at the weakness he felt, the near nausea, the protests of a body allowed to degenerate into a state of general unfitness. It all seemed wrong. Surely he had always taken pride in maintaining himself in good condition.

He stood under the shower, and gradually the mists cleared from his brain. In a little while John Grimes, Officer Commanding the Zetland Base, passed over Commander, would be ready to begin his dreary day.

Nobody quite knew why the Federation maintained a base on Zetland. Once, a long time ago, the planet had been strategically important when it seemed possible that the Federation and the expanding Shaara Empire might clash, but the Treaty of Danzenorg, respected by both cultures, had neatly parceled up the entire galaxy into spheres of influence. True, there were other spacefaring races who belonged neither to the Federation nor the Empire, but their planets were many, many light years distant from Zetland and their trade routes passed nowhere near this world.

There was a base on Zetland. There always had been one; there always would be one. The taxpayer had bottomless pockets. There were spaceport facilities, of a sort. There were repair facilities, also of a sort. There was a Carlotti beacon, which was an absolutely inessential part of the navigational network in this sector of space, and relay station. The whole setup, such as it was, could have been run efficiently by a lieutenant junior grade, with a handful of

petty officers and ratings. But a base commander must have scrambled egg on the peak of his cap. The Commander of a base like Zetland is almost invariably on the way up or the way down.

Commander John Grimes was not on the way up.

Nonetheless, he did have that scrambled egg on the peak of his cap. There was also a smear of egg yolk at the corner of his mouth, and a spatter of it on the lapel of his jacket. His enlisted woman driver, waiting for him in the ground car outside the Base Commander's bungalow, looked at him with some distaste—apart from anything else, she had been there for all of twenty minutes—clambered reluctantly out of the vehicle (her legs, noted Grimes, were too thick and more than a little hairy) and threw him a salute that almost, but not quite, qualified as "dumb insolence." Grimes returned it contemptuously. She opened the rear door of the car for him. He got in, thanking her as an afterthought, sagged into the seat. She got back behind the controls, clumsily stirred and prodded the machine into reluctant motion.

It was only a short drive to the military spaceport. The Commander thought, as he had thought many times before, that he should walk to his office rather than ride; the exercise would do him good. But somehow he never felt up to it. He stared unseeingly through the dirty windows. The view was as it always was: flat fields with an occasional low farmhouse, uninteresting machines trudging through the dirt on their caterpillar treads sowing or reaping or fertilizing the proteinuts which were Zetland's only export—and that only to worlds too poverty-stricken to send anything worthwhile in exchange. Ahead was the base—administration buildings, barracks, control tower and the lopsided ellipsoid that was the Carlotti beacon, slowly rotating.

The car rolled over the concrete apron, jerked to a halt outside the control tower. The girl driver got out clumsily, opened the Commander's door. Grimes got out, muttered, "K you."

She replied sweetly, "It was a pleasure, sir."

*Saucy bitch*, thought Grimes sourly.

He did not take the elevator to his office on the top level of the tower. Thoughts about his lack of physical fitness had been nagging him all morning. He used the stairs, taking them two at a time at first. He soon had to abandon this practice.

By the time that he reached the door with BASE COMMANDER on it in tarnished gilt lettering he was perspiring and out of breath and his heart was hammering uncomfortably.

Ensign Mavis Davis, his secretary, got up from her desk as he entered the office. She was a tall woman, and very plain, and old for her junior rank. She was also highly efficient, and was one of the few persons on this world whom Grimes liked.

"Good morning, Commander," she greeted him, a little too brightly.

"What's good about it?" He scaled his cap in the general direction of its peg, missed as usual. "Oh, well, it's the only one we've got."

She said, holding out a message flimsy, "This came in a few minutes ago . . ."

"Have we declared war on somebody?"

She frowned at him. She was too essentially good a person to regard war as a joking matter. "No. It's from *Draconis*. She's making an unscheduled call here . . ."

A *Constellation Class* cruiser, thought Grimes. *Just what I need . . .* He asked, "When is she due?"

"Eleven hundred hours this morning."

"What?" Grimes managed a grin. "The fleet's in port, or almost in port, and not a whore in the house washed . . ."

"That's not funny, Commander," she said reprovingly.

"Indeed it's not, Mavis," he agreed. Indeed it wasn't. He thought of the huge cruiser, with all her spit and polish, and thought of his own, slovenly, planet-based command, with its cracked, peeling paint, with dusty surfaces everywhere, with equipment only just working after a fashion, with personnel looking as though they had slept in their uniforms—as many of them, all too probably, had. He groaned, went to the robot librarian's console, switched on. "Fleet List," he said. "*Draconis*. Name of commanding officer."

"Yes, sir." The mechanical voice was tinny, absolutely unhuman. "Captain Francis Delamere, O.G.C., D.C.O., F.M.-H. . . ." Grimes switched off.

*Franky Delamere*, he thought. *A lieutenant when I was a two and a half ringer. A real Space Scout, and without the brains to come in out of the rain, but a stickler for regulations. And now he's a four ring captain . . .*

"John . . ." There was sympathy in the Ensign's voice.

"Yes, Mavis?"

She was abruptly businesslike. "We haven't much time, but I issued orders in your name to get the place cleaned up a bit. And the Ground Control approach crew are at their stations, and the beacons should be in position by now . . ."

Grimes went to the wide window. "Yes," he said, looking down at the triangle of intensely bright red lights that had been set out on the gray concrete of the apron, "they are. Thank you."

"Do you wish to monitor G.C.A.?"

"Please."

She touched a switch, and almost immediately there was the sound of a crisply efficient voice. "*Draconis* to Zetland Base. E.T.A., surface contact, still 1100 hours. Is all ready?"

"All ready, *Draconis*," came the reply in accents that were crisp enough.

"Just one small thing, John," said Mavis. She stood very close to him, and with a dampened tissue removed the flecks of egg yolk from the corner of his mouth, from his uniform. "Now, let 'em all come," she declared.

"Let 'em all come," he echoed.

He remembered a historical romance he had read recently. It was about a famous English regiment whose proud epitaph was, *They died with their boots clean*.

Living with your boots clean can be harder.

*Draconis* was heard long before she was seen, the irregular throb of her inertial drive beating down from beyond the overcast. And then, suddenly, she was below the cloud ceiling, a great, gleaming spindle, the flaring vanes of her landing gear at her stern. Grimes wondered if Francis Delamere were doing his own pilotage; very often the captains of these big ships let their navigating officers handle the controls during an approach. He thought smugly that this was probably the case now; when Delamere had served under Grimes he had been no great shakes as a ship handler.

Whoever was bringing the cruiser down, he was making a good job of it. Just a touch of lateral thrust to compensate for the wind, a steady increase of vertical thrust as altitude diminished, so that what at first had seemed an almost uncontrolled free fall was, at the moment of ground contact, a downward drift as gentle as that of a soap bubble.

She was tall, a shining metallic tower, the control room at

her sharp stem well above the level of Grimes's office. Abruptly her inertial drive was silent. "Eleven oh oh oh seven . . ." announced Mavis Davis.

"Mphm," grunted Grimes.

He retrieved his cap from the floor, let the Ensign, who had found a clothes brush somewhere, brush its crown and peak. He put it on. He said to the girl, "Look after the shop. I have to go visiting." He left his office, took the elevator down to ground level. He was joined by the Base Supply Officer, the Base Medical Officer and the Base Engineering Officer. All three of them, he noted, looked reasonably respectable. Grimes in the lead, they marched out to the ramp that was just being extended from *Draconis's* after airlock.

*It was good to be boarding a ship again, thought Grimes, even one commanded by a man who had once been his junior and who was now his senior.* As he climbed the ramp he threw his shoulders back and sucked in his belly. He returned the salute of the junior officer at the airlock smartly and then, followed by his own officers, strode into the elevator cage. The woman operator needed no instructions; in a very few seconds the party from the base was being ushered into the Captain's day room.

"Ah," said Delamere, "Commander Grimes, isn't it?" He had changed little over the years; his close-cropped hair was touched with gray, but he was as boyishly slim and handsome as ever. The four gold rings gleamed bravely on each sleeve, and the left breast of his uniform was gaudy with ribbons. "Welcome aboard, Commander."

"Thank you, Captain." Grimes had no intention of addressing the other as "sir."

"You're putting on weight, John," said the Specialist Commander who was one of the group of officers behind Delamere.

"Maggiel"

"Commander Lazenby," said the Captain stiffly, "this touching reunion can be deferred until such time as the Base Commander and I have discussed business."

"Aye, aye, sir," snapped Margaret Lazenby, just a little too crisply.

Delamere glared at her, John Grimes looked at her wistfully. *She* hadn't put on weight. She had hardly changed since they had been shipmates in the census ship *Seeker*.

Her red hair gleamed under her cap, her figure was as slim and trim as ever. But . . .

But she was not the slender, auburn-haired woman who haunted his dreams.

"Commander Grimes," said Delamere. Then, more loudly, "Commander Grimes!"

"Yes, Captain?"

"Perhaps we can get the introductions over with, and then you and I can get down to business."

"Certainly, Captain. This is Lieutenant Commander Dufay, the Base Medical Officer. Lieutenant Danby, Supplies. Lieutenant Roscoe, Engineering."

Delamere introduced his own people, and then the specialist officers went below, leaving the Captain to conduct business with Grimes.

"A drink, Commander?"

"Please, Captain. Gin, if I may."

"You may. Sit down, Grimes." Delamere poured the drinks, took a chair facing the other. "Down the hatch."

"Down the hatch."

The Captain grinned. "Well, Grimes, I don't seem to have caught you with your pants down. Frankly, I was rather hoping I would . . ."

"What do you mean?"

"I haven't forgotten that bad report you put in on me . . ."

"It was truthful," said Grimes. "You were a lousy ship handler." Then, "By the way, who brought *Draconis* in?"

"None of your business," snapped Delamere, an angry flush on his face. After a second or so he continued. "For your information, Grimes, an economy wave is sweeping the Service. There is a cutting out of deadwood in progress. Certain ships, *Draconis* among them, have been selected by our lords and masters to make the rounds of bases such as this one, and to report upon them. My last call was at Wuggis III. The Base Commander who was in charge is now on the retired list. His G.C.A. was in such a state that I was obliged to use the commercial spaceport."

"How nice for you," commented Grimes.

The Captain ignored this. "I'm giving you fair warning, Commander. You'd better be prepared. For the purposes of this exercise a state of war is deemed to exist. *Draconis* has limped into your base with 75% casualties, including all technical officers. These same technical officers are, even

now, arranging a simulation of extensive damage. The Mannschenn Drive, for example, will require a new governor and will have to have its controls recalibrated. Only one inertial drive unit is functional, and that is held together with spit and string. My laser cannon are burned out. My yeast, algae and tissue culture vats contain only slimy, dead messes utterly unfit for human—or even unhuman—consumption.” He laughed. “All the parts that have been removed from machinery and weapons are, of course, securely locked in my storerooms, where your people won’t be able to get their greasy paws on them. *You*, Grimes, starting from scratch, using your people, your workshops, starting from scratch, will have to bring *Draconis* back to a state of full fighting efficiency, as soon as possible if not before.”

“Then I’d better get cracking,” said Grimes. He got to his feet, glanced briefly and regretfully at his almost untouched glass. It was good liquor, far better than any that could be obtained locally—but, even now, he was rather fussy about whom he drank with.

“You’d better,” agreed Delamere. “Oh, you haven’t finished your drink, Commander.”

“Your ship’s in such a sorry, simulated state,” Grimes told him, “that we’ll make believe that you need it yourself.”

He forgot to salute on the way out.

“I knew something like this would happen,” complained Marian tearfully. “What shall we do, John? What can we do? A commander’s pension is not much.”

“Too right it isn’t.” He looked thoughtfully at the half inch of oily gin remaining in his glass, brought it to his mouth and swallowed it, gagging slightly. He reached for the bottle, poured himself another generous shot.

“You drink too much,” flared his wife.

“I do,” he agreed, looking at her. She was almost passable when alcohol had dimmed the sharp edges of his perception. He murmured:

*“Malt does more than Milton can*

*To justify God’s ways to Man . . .”*

“What?”

“Housman,” he explained. “A poet. Twentieth century or thereabouts.”

“Poetry!” she sneered contemptuously. “But what are you doing about Captain Delamere? He was such a *nice* young

man when he was one of your officers, when we were all happy at Lindisfarne Base . . ."

"Yes, Franky was always good at sucking up to captains' and commodores' and admirals' wives."

"But you must have *done* something to him, John. Couldn't you apologize?"

"Like hell," growled Grimes. "Like adjectival, qualified hell."

"Don't swear at me!"

"I wasn't swearing."

"You were thinking it."

"All right, I was thinking it." He finished his drink, got up, put on his cap. "I'd better get down to the ship to see what sort of mess my butterfly-brained apes are making of her."

"What difference will your being there make?"

"I'm still Commander of this bloody base!" he roared.

He looked back at her briefly as he reached the door, felt a spasm of pity. She was such a mess. She had let herself go. (As he had let himself go.) Only faint traces remained of the attractive Ensign Marian Hall, Supply Branch, whom he, on the rebound, had married. Physically there was no longer any attraction. Mentally there was—nothing. She read only trash, was incapable of intelligent conversation, and could never join Grimes in his favorite pastime of kicking ideas around to see if they yelped. He wondered how things would have worked out if he and Maggie Lazenby had made a go of things. But to have Maggie here, on this world, at this juncture was too much.

He walked to the military spaceport. The night was mild, not unpleasant in spite of the wisps of drizzle that drifted over the flat landscape. Now and again Zetland's twin moons appeared briefly in breaks in the clouds, but their light was faint and pallid in comparison to the glare of the working floods around *Draconis*.

He tramped slowly up the ramp to the airlock, returned the salute of the O.O.D., one of Delamere's men. The elevator was unmanned—but, after all, the ship had suffered heavy simulated casualties, so ratings could not be spared for nonessential duties. He went first to the "Farm." The vats had been cleaned out, but the stink still lingered. The cruiser's Biochemist had carried out his "sabotage under orders" a little too enthusiastically. He exchanged a few



words with Lieutenant Commander Dufay, in charge of operations here, then went down a couple of decks to the inertial drive room. He looked at the confusion without understanding it. Roscoe and his artificers had bits and pieces scattered everywhere. It was like a mechanical jigsaw puzzle.

"She'll be right, Commander," said the Engineer Lieutenant. He didn't seem to be convinced by his own words. Grimes certainly wasn't.

"She'd better be right," he said.

Somebody else was using the elevator, so he decided to take the companionway up to Control—he *did* know more than a little about navigational equipment—rather than wait. His journey took him through Officers' Country. He was not altogether surprised when he was accosted by Commander Lazenby.

"Hi, John."

"Hi, Maggie."

"Are you busy?"

He shrugged. "I should be."

"But we haven't seen each other for years. Come into my dogbox for a drink and a yarn. It's all right—the Boy Wonder's being wined and dined by the Governor in Zeehan City."

"He might have told me."

"Why should he? In any case, he's on the Simulated Casualty List. He's probably awarded himself a posthumous Grand Galactic Cross."

"With golden comets."

"And a platinum spiral nebula." She laughed. "Come in, John. Take the weight off your feet." The door to her day cabin opened for her. "This is Liberty Hall. You can spit on the mat and call the cat a bastard."

"You haven't changed, Maggie," he said ruefully, looking at her. "I wish . . ."

She finished it for him. "You wish that you'd married me instead of that little commissioned grocer's clerk. But you were always rather scared of me, John, weren't you? You were afraid that you, a spacehound pure and simple, wouldn't be able to cope with me, a qualified ethologist. But as an ethologist I could have seen to it that things worked out for us."

She sat down on her settee, crossing her slim, sleek legs. Her thin, intelligent face under the red hair was serious.

He looked at her wistfully. He murmured—and it was as much a question as a statement—"It's too late now."

"Yes. It's too late. You've changed too much. You did the wrong thing, John. You should have resigned after that court martial. You could have gone out to the Rim Worlds to make a fresh start."

"I wanted to, Maggie. But Marian—she's incurably Ter-ran. She made it quite plain that she'd not go out to live among the horrid, rough colonials. As far as she's concerned, everywhere there's a Survey Service Base there's a little bit of Old Earth, with society neatly stratified. Mrs. Commander is just a cut above Mrs. Lieutenant Commander, and so on down." He fumbled for his pipe, filled and lit it. "She had the idea, too, that My Lords Commissioners would one day forgive me and that she'd finish up as Mrs. Admiral Grimes . . ."

"My heart fair bleeds for you both," she said drily. "But mix us drinks, John. You'll find the wherewithal in that locker."

"For you?"

"The same as always. BVG, with just a touch of lime."

There was a hologram over the grog locker, a little, brightly glowing window onto another, happier world. It was a beach scene: golden sand, creamy surf, blue sea and sky, and the golden brown bodies of the naked men and women.

Grimes asked, "Do you still spend your long leaves on Arcadia, Maggie?"

"Too right I do. It's the only possible planet for an ethologist who takes the 'Back To Nature' slogan seriously."

"You look happy enough in this hologram . . ." Grimes inspected the three-dimensional picture more closely. "*Who is that with you?*"

"Peter Cowley. He's a Senior Biochemist with Trans-Galactic Clippers."

"No. Not *him*. The woman."

She got up to come to stand beside him. "Oh, her. That's Sonya Verrill. Yet another of the Commanders with whom the Survey Service is infested. She's Intelligence. Do you know her?"

Grimes stared at the depiction of the nude woman. She was like Maggie Lazenby in many ways, her figure, her coloring, her facial features, could almost have been her

sister. He looked more closely. There should be a mole on her left hip. There was.

"Do you know her?" asked Maggie again.

"Yes . . . No . . ."

"Make your mind up."

*I don't know her, thought Grimes. I have never met her. But I have dreamed about her. I thought it was Maggie in my dreams, a somehow different Maggie, but she hasn't a mole anywhere on her body . . .*

He said, "No, I don't know her. But she is like you, isn't she?"

"I can't see any resemblance. You know, she was almost going to call here; she's sculling around this neck of the woods in one of those little, fully automated armed yachts. Some hush-hush Intelligence deal. But when she heard that this was one of the Boy Wonder's ports of call she decided to play by herself somewhere."

"Has *he* met her?" asked Grimes, feeling absurdly jealous.

"Yes. They do not, repeat not, like each other."

"Then there must be some good in her," said Grimes, with a quite irrational surge of relief.

"Never mind her. What about me? I'm thirsty."

"All right, all right," said Grimes, mixing the drinks.

When he got home Marian was waiting up for him.

"You've been drinking," she accused him.

"And so, to coin a phrase, what?"

"I don't mind that so much. But you've been with that . . . bitch, that Maggie Lazenby."

"I had a couple of drinks with her, that was all."

"Don't lie to me!"

"I'm not lying."

No, he wasn't lying. Maggie, in her woman's way, had offered him more than a drink, but he had turned it down. Even now he was not sure why he had done so. Or he was sure, but would not admit it to himself. It was all so crazy, so utterly crazy. He had been loyal to a woman whom he had never met, whose hologram he had seen for the first time, in Maggie's day cabin.

"After all I've done for you, and you going sniffing around that carroty alley cat. You're no good, you're just no good. You never were, and you never will be . . ."

Grimes brushed past her, into the living room, the Service

severity of which had been marred by his wife's tasteless attempts at interior decoration.

"Say something, damn you! Say something, you waster. Haven't you even the guts to defend yourself?"

The telephone buzzed urgently. Grimes went to it, flipped down the switch. The screen came alive and the plain, almost ugly face of Mavis Davis looked out at him. "Commander, there's an emergency . . ."

"Yes?" *And what was it? Had his fumbling repair squads wreaked some irreparable damage upon the cruiser? He'd better start packing his bags.*

"A Mayday."

"Who?" he demanded. "Where?"

"The armed yacht *Grebe*. In solar orbit between Zetland and Freiad." She rattled off coordinates. "Meteor swarm. Extensive hull and machinery damage. Loss of atmosphere. Orbit decaying."

"Mavis, send a car for me. At once."

"Wilco, Commander."

"And what can *you* do?" his wife sneered. "Captain Delamere's got a cruiser and hundreds of really efficient men and women. What have *you* got?"

"Out of my way!" he snarled.

"John! You can't go. I forbid you!" She clung to his sleeve but, brutally, he shook her off. She followed him for a little way as he strode out of the house, along the dark road, then gave up. "John!" she called. "John!"

The lights of the car were ahead, approaching rapidly. It passed him, turned, braked. Mavis Davis was driving. He got in beside her.

She said, as she restarted the vehicle. "*Husky?*"

Of course, it had to be the base's space tug *Husky*. Delamere's cruiser was out of commission and the tug at the civilian spaceport was, Grimes knew, undergoing annual survey. *Husky* was the only ship on Zetland capable of getting upstairs in a hurry.

And she was Grimes's toy, his pet. She was more than a toy, much more. In her he could feel the satisfaction of real command, or symbiosis with his ship. She was the only piece of equipment on the base in absolutely first class condition—and Grimes and Mavis, working with their own hands, had kept her so. She was referred to as "the Old Man's private yacht."

"I told Petty Officer Willis to warm her up," said Mavis. "Good girl."

"Can . . . Can I come with you?"

"I'd like you to." She was a clerical officer, trained as such, but she should have been an engineer. She possessed the inborn skills, the talents and a keen mathematical mind. Often she had accompanied Grimes on his short jaunts outside the atmosphere. "You know the little bitch better than anybody else on the base."

"Thank you, John."

The car screamed on to the apron, circled the great, useless, floodlit hulk of *Draconis*. *Husky* was in her own berth, tucked away behind the workshops, a dull metal ovoid standing in her tripodal landing gear like a gray egg in an egg-cup. A circle of yellow light marked her airlock door.

As the car stopped Grimes heard a noise in the sky. It was a jet, coming in fast. The shriek of its exhaust varied in pitch as its turret drive was used first to brake and then to ease the aircraft to a vertical touchdown. The aircraft slammed to the concrete just a few feet from the car.

A man jumped out of the cabin, confronted Grimes. It was Delamere, still in his mess dress, starched white linen, black bow tie, tinkling miniatures and all.

"Is she ready?" he demanded.

"Yes, Captain. I'll have her up and away as soon as the airlock's sealed."

"You aren't taking her up, Grimes. I am." Delamere grinned whitely. "Life's been a little too dull lately."

"Like hell you're taking her up, Delamere. This is *my* base, and *my* tug."

"And I am your superior officer, Grimes. You'd better not forget it."

"You're not likely to let me, are you? But this is a rescue operation—and I know how to handle a ship."

"Out of my way, you insolent bastard!"

Grimes swung clumsily, but with all his weight behind the blow, and the weight of all the years of misery and frustration. Delamere wasn't as fit as he looked. Grimes's fist sank deep into his midriff, under the black silk cummerbund. The air was expelled from the Captain's lungs in an explosive *oof!* He sat down hard and abruptly. He gasped something about striking a superior officer, about mutiny.

"Willis," Grimes called to the Petty Officer, who had ap-

peared in the airlock, "drag the Captain clear of the blast area. I'm going to use the auxiliary rockets. And keep clear yourself."

"But, sir . . ."

"You don't want to be up with me on a charge of mutiny. Get out of here, and take the Captain with you. That goes for you too, Mavis."

"Like hell it does!"

Grimes paused briefly. He could manage the tug single-handed, but with rescue operations involved it would be asking for trouble. He grabbed Mavis by her bony shoulder. "Scream!" he whispered. "I'm dragging you aboard by force!"

She screamed, shrieked, "Let go of me!" From where Delamere was sprawled the struggle would look convincing enough. And then they were in the airlock, and as the door shut Grimes saw that Willis already had Delamere well clear. The Commander hurried up to the little control room while Mavis went to the engines. He plumped down into the pilot's chair and, as he strapped himself in, cast an experienced eye over the telltale lights. REACTION DRIVE—READY. INERTIAL DRIVE—READY. MANNSCHENN DRIVE—STAND BY.

His fingers found the firing studs in the arm of his chair. He said into the microphone hanging before him, "Secure all. Secure all for blast off."

Mavis's voice came in reply. "All secure, Captain."

"Then—*blast!*" almost shouted Grimes.

He pressed the button, and *Husky* screamed upstairs like a bat out of hell.

There was only one person aboard the crippled *Grebe*, a woman. Her voice was faint, almost incoherent. She was in her suit, she said. She had a broken arm, and possible internal injuries. She thought that she would be able to ship a new air bottle when the one in use was exhausted . . .

"Can you actuate your Carlotti transceiver?" demanded Grimes urgently.

"I . . . I think so . . ."

"Try. I'm going to switch to Mannschenn Drive. I'll home on your Carlotti."

"Mannschenn Drive?" asked Mavis, who had come up to Control.

"Yes. I want to be there in minutes, not days, and the

Mannschenn Drive's the only way. I know it's risky, but . . ."

It *was* risky, to operate the Drive in a planetary system with its tangle of gravitational and magnetic fields, but it had to be done. Grimes jockeyed the free-falling *Husky* around on her gyroscope, lining her up on the faint signals from the survivor's suit radio. He started the Drive. There was the usual second or so of disorientation in space and time, and then, astern of them, Zetland assumed the appearance of a writhing, convoluted ball of luminous gas, and ahead and to starboard the sun became an iridescent spiral. Grimes paid no attention. He heard the faint voice from his own Carlotti speaker—"Carlotti on."

"Can you fix it so that it sends a continuous note? Turn up the gain . . ."

"Wilco."

A faint, continuous squeal came from the speaker.

Good. Grimes watched the quivering antenna of his Carlotti direction finder and communicator, the ellipsoid Mobius strip that was rotating slowly about its long axis. He restarted the inertial drive and then, with lateral thrust, using the antenna as a compass needle, headed the tug directly for the distant wreck. He pushed the inertial drive control to full ahead. The irregular throbbing shook the little ship. "Mavis," he said, "see if you can coax a few more revs out of the bone shaker . . ."

"I'll try," she told him, and was gone.

A fresh voice came from the speaker. It was Delamere. "Grimes. Captain Delamere calling ex-Commander Grimes. Do you read me?"

"Loud and clear, Delamere. Get off the air. I'm busy."

"Grimes, I order you to return at once. Ensign Davis, I authorize you to use force if necessary to overcome the mutineer and to assume command of *Husky*."

Grimes watched the antenna. It showed a continual drift of the target in a three o'clock direction. The wreck was in orbit, of course. He would have to allow for that. He did so, applying just the right amount of lateral thrust.

"Grimes! Ensign Davis! Do you hear me?"

Damn the man. So far the antenna was keeping lined up on the signal from the disabled *Grebe*, but with the base transmitting at full power it was liable to topple at any second.

"Grimes! Ensign Davis!"

"Grimes here. I can't give any orders, but I can appeal to those of you in the Carlotti room. This is a rescue operation. I'm homing on *Grebe's* Carlotti beacon. There's a woman out there, in the wreck, and she can't last much longer. Please get off the air, and stay off."

He was never to know what happened, but he thought he heard the sound of a scuffle. He thought he heard a voice—Maggie's voice—whisper, "Pull the fusel"

He transferred his attention to the spherical tank of the mass proximity indicator. Yes, there it was, a tiny, glowing spark, barely visible. It was drifting fast in toward the center of the globe. Too fast? Not really. For a collision to occur, two vessels must occupy the same space at the same time, and as long as *Husky's* Mannschenn Drive was operating she was in a time of her own. But—talking of time—he didn't want to waste any. "Mavis," he said into the intercom mike, "when I put her on full astern I *want* full astern. No half measures."

"You'll get it," she assured him.

The spark was brighter now, crossing one concentric ring after another. Grimes adjusted the scale of the indicator, pushing the target back to the outermost circle. Still it drove in. Grimes adjusted the scale again, and again, and once more. Target spark merged with the bead of luminosity that represented *Husky*. For a microsecond there was an uncanny sensation of merging—not of ships, but of two personalities. "Mannschenn Drive—off!" snapped Grimes, executing his order. "Inertial drive—full astern!"

The ship shuddered, striving to tear herself apart. Colors sagged down the spectrum as the ever-precessing gyroscopes of the Mannschenn Drive were braked to a halt—but outside the viewports the stars, vibrating madly, still looked as they had done while the drive was in operation.

"Stop all!" muttered Grimes, jerking the lever to its central position.

And there, scant feet away, rotating slowly about some cockeyed axis, was the torn, buckled hull of the space yacht *Grebe*.

Mavis Davis came up to Control while Grimes was putting on his suit. She was bleeding slightly from an abrasion on her forehead. Like many another plain woman she was beautiful in conditions of emotional and physical stress. Be-



fore she lowered the helmet onto his shoulder she kissed him. It was a brief contact, but surprisingly warm. Grimes wished that it could have been longer.

She said, "Good-bye. It's been nice knowing you, John."  
"What the hell's this, Mavis?"

She grinned lopsidedly. "I have my fey moments—especially when somebody is playing silly buggers with the Mannschenn Drive . . ." Then she was securing the helmet and further speech was impossible.

Grimes collected what tools he would require on his way down to the airlock. When the outer door opened he found that he could almost step across to *Grebe*. He pushed himself away from his own little ship, made contact with the hull of the other with the magnetic soles of his boots and palms of his gloves. He clambered over her like a clumsy, four-legged spider. He soon discovered that it would be impossible to open *Grebe's* airlock door. But it didn't matter. A few feet away from it was a hole large enough for him to crawl through.

He said into his helmet microphone, "I'm here."

The faint voice that replied, at long last, held an oddly familiar astringent quality. "And about time."

"I came as quickly as I could. Where are you?"

"In the control room."

Grimes made his way forward, using cutting torch and crowbar when he had to. When he found her she was in the pilot's chair, held there by the seat belt. Moving feebly, she contrived to swivel to look at him. *Husky's* floods were on, glaring through the viewports, but her face, inside the helmet, was in shadow.

She said, "I hate to have to admit it, but you're right, John."

"What do you mean?"

"What you always say when you deliver yourself of one of your diatribes against automation. 'Never put yourself at the mercy of a single fuse.' My meteor shield might as well have not been there, and by the time the alarm sounded it was too late to do anything . . ."

He was beside her now, holding her, cursing the heavy suits that were between them.

"Sonya, I've got to get you out of here. Aboard *Husky*." He fumbled with the strap that held her.

"Too . . . late." She coughed, and the sound of it, telling

of fluid-filled lungs, was terrifying. "Too . . . late. I hung on as long . . . as I could. Start . . . Mannschenn Drive. Should be some . . . power . . . in batteries . . ."

"Sonya! I'm getting you out of here!"

"No. No! Start . . . Drive . . ."

But he persisted in trying to unstrap her. Summoning her last reserves of strength she pushed him away. He lost contact with the deck, drifted away from her. He clutched at something—a lever?—that moved in his hand.

He did not hear the Drive starting; there was no air in the ship to carry the sound. But he felt the vibration as its rotors stirred into life, was aware that the harsh light of *Husky's* floods had deepened from white to a sullen red. Around him, around Sonya, the universe lost its substance. But he was solid still, as she was, and her hand was firm in his.

And . . .

She was saying, "We found each other again. We found each other again . . ."

Grimes looked at her, looked at her a long time, dreadfully afraid that she would vanish. He held her hand tightly. Then, but cautiously, he stared around him at the temple. It seemed to have lost its alien magic. It was just a large, featureless room with the dimensions of a cube. On the floor, annoyingly off center, was a block of black stone in the shape of a coffin.

He said, "That dream . . . If it was a dream . . ."

She said, "There is a fourth rate Survey Service Base on Zetland . . ."

He said, "The last I heard of Delamere he'd been kicked upstairs to become a deskbound commodore . . ."

She said, "Damn your silly dream. Forget about it."

"I'll try," he promised. And then, unbidden, familiar words formed themselves in his mind. He said them aloud:

"To sleep, perchance to dream . . .

Ay, there's the rub . . ."

Something about the emphasis he used made her ask, "What's the rub, John?"

"What is the dream? *That* or *this*?"

"What does it matter?" she asked practically. "We just make the best of what we've got." Then, as they walked out of the drab temple, "Damn! My ribs are still hurting!"

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