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The Time Mercenaries

by Philip E. High

Chapter One

THE SUBMARINE crept through the water with the stealth of her kind but without high drama. This was routine, a normal return after a normal exercise in peacetime.

It was a late December afternoon, with the coming night forming shadows between the wave crests and a few snow flakes drifting down from the dark sky.

Beneath the water, Randall said, "Up periscope," and sighed, pressing his face to the rubber covered eyepieces as the instrument rose.

Happy days! Home for Christmas! Wonderful—if you had a tolerable home. He was pleased for the men, of course, but for his own part he would rather have remained at sea.

Before the periscope broke surface, however, his thoughts were interrupted. Above the normal noises of the vessel was another sound which would have been meaningless to the inexperienced but to Randall spelled danger. In wartime he had heard that sound too often and, on many occasions, for far too long.

As the periscope finally broke surface, he swung the instrument desperately, searching for the cause of the sound. The area should be navigationally clear and kept clear on Admiralty orders but...

"Dive, dive, *dive!*" He heard his own voice shouting the order, felt his palm come down on the klaxon but he was aware of a curious feeling of detachment, as if someone else had given the order.

A destroyer! There shouldn't be a destroyer within fifty miles! He had caught only a brief glimpse of the sharp gray bows hurling back the sea in twin white crests but she had been pushing it close to forty-five knots. Worse, she had been coming straight at them.

They could all hear it now—Get *this blasted tub down!*—faces shiny and tense, eyes fixed and unmoving.

Sound! The express train sound of a destroyer racing through the water.

They were not going down fast enough. Unless a miracle occurred, the destroyer was going to ram them. The sharp gray bows would come slicing through rivet and bulkhead with a tortured crumpling sound.

Randall was aware that he was hunched, rigid and braced for impact. There was no escape now: the destroyer was right on the top of them and the noise of the racing screws seemed to fill the entire vessel.

It seemed to Randall that suddenly the world exploded. Somewhere there was an appalling crash; the vessel lurched and seemed to be flung upward. There were a series of vivid lightnings, nausea and a descending curtain of blackness.

He was never sure if he quite lost consciousness but the darkness seemed to vanish almost at once and brightness was hurting his eyes.

He stared into the light and slowly vague outlines began to emerge. Surely that was the periscope?

Everything seemed to flicker again and then he found himself staring into the white, strained face of First Lieutenant Cooper.

Cooper's lips were drawn back, exposing his teeth, and sweat ran in little runnels from his temples to his neck.

"She missed us!" It was almost a prayer.

"Only just." Coldness seemed to blow across Randall's damp face.
"Check the entire ship for damage, Number One."

"Yes, sir." His voice seemed to blend with, and be carried away by, the rapidly receding sound of the destroyer's screws.

He was back within less than two minutes.

"No report of damage from any compartment, sir. A couple of circuits in the electrical system blew out but they can be replaced from stores." He hesitated. "Four men passed out, sir. I had them put in the sick bay and sedated. The S.B.A. could find no broken bones or signs of internal injury, sir."

"Good work, Number One."

"Sir." Cooper's voice was hesitant and slightly hoarse.

"It was kind of odd, wasn't it? I mean, I thought—I had the impression that we were actually rammed." Randall met the other's eyes. "So did I." Cooper blinked at him. "Any explanation, sir?"

"Frankly, no, but I think I can dream up something moderately convincing." He switched on the intercom and unhooked the mike. "Now hear this—now hear this. Captain speaking." He paused briefly. "As you are all probably aware, we are very lucky to be alive. Only a few moments ago we narrowly escaped being rammed by one of our own destroyers. I may add here that this vessel had no right being in these waters and when we get into port I shall hand in a very strongly worded report. I have no doubt whatever that there will be a full inquiry.

"In the meantime, I am sure that many of you had the impression that a collision actually occurred, but this is not an uncommon reaction in times of extreme tension. On many occasions during the war, in depth charge attacks, I was quite sure we had been holed and was amazed to find later that we had sustained no damage whatever.

"In our own case, the illusion was heightened by the failure and subsequent blowing-out of some of the electrical circuits. The failure of the lighting system for a brief period and a great deal of sparking and flashing no doubt convinced a large number of already over-tense minds that a collision had actually occurred. As you have all observed, we

sustained no damage at all.

"Let us not be smug, however; we escaped serious damage by a miracle and it behooves us to pause and give inward thanks for our escape."

He paused for an appropriate period and managed with some effort to instill some slight amusement into his voice.

"I am sure, in view of the emotional strain you have all undergone, rum all around would not pass unappreciated."

He snapped off the intercom. "Blow tanks. Up periscope."

A minute later he said, "Half ahead together," then "Think I'll take a look around aloft."

Once in the conning tower, he leaned on the rail and drew the cold winter air deep into his lungs. It had been a dream, hadn't it?

He looked across the dark choppy water and, slightly to port, the warning beam from the Wendell lightship stabbed toward him like an accusing finger and was gone.

Dead ahead, a cluster of lights pin-cushioned the horizon: Seaforth, major port and their naval base, not far now.

Lieutenant Cooper joined him in the conning tower. "All shipshape below, Skipper." He cleared his throat nervously. "You gave a pretty convincing explanation, sir."

Randall looked at him sideways. "Did it convince you, Number One?"

Cooper thought about it. "I'm working on it," he said honestly. "Factually, rationally, I go all the way, of course, but it seemed so damned real at the time, I could have sworn on oath that we were rammed."

Randall found his pipe and thrust it unlighted between his teeth. "Obviously we were not, but it might be interesting to compare our experiences later. How about the Long Bar on Slade Street, preferably over a brandy?"

"This is better." Cooper sipped the brandy gratefully and stretched his long thin legs under the small table. "Lights, people, music—it makes one

feel human again, sir."

"Quite." Randall removed his peaked cap. "Well, Number One, let's get down to cases. I take it that you thought you heard the impact."

Cooper looked relieved. "Well, yes, sir, I'm almost ready to swear—" He stopped.

"Something the matter?"

"I—" Cooper lifted the brandy glass and put it down again a little unsteadily. "Must be the lights, sir, but for the moment you looked—you still look—so *darned young*."

"Really, Number One! I am forty-six, graying at the temples and my hair is thinning rapidly."

"Perhaps—perhaps you'd better take a look in the mirror behind the bar, sir."

Randall looked puzzled. "Very well, it's my round anyway. Drink up and I'll get these glasses back." He took them and walked toward the bar.

"Two double brandies, please." He caught a glimpse of himself in the long, brightly lighted mirror and one of the glasses slipped through his fingers and broke on the floor.

His hair was thick, dark and slightly wavy. His face was still lean and brown but the flesh was firmer and a lot of wrinkles had disappeared from around his eyes. Somehow, somewhere, at least from his appearance, he had dropped sixteen years. He was thirty again.

He heard himself say, "Sorry, I'll pay for the glass—yes, yes, I am quite all right, thank you. Two double brandies, please."

He returned to his table on legs which felt as if they had developed new and treacherous joints at the knees.

"I see what you mean." He sat down, heavily.

"I'm sorry, sir, I thought you ought to know." Cooper's attempt to sound normal was heroic but unconvincing. "It's just another thing; despite all the rationalization I haven't *felt* right since—since it happened, sir."

Randall frowned at him. It was on the tip of his tongue to come back with some sarcastic remark but the words would not come. He had not *felt* right himself.

They both became aware that someone was standing by them and both looked up together.

"Captain Randall and Lieutenant Cooper?" The questioner was well dressed but hatless. The gray hair was parted in the center and the face was lean, brown and hard.

"Yes, what can we do for you?" Randall managed to take both polite and interested.

"I'm afraid I'm here for sterner purposes than amiable cooperation, Captain." He produced a small brown folder from his pocket and held it out for their inspection. "The name is Forsythe; as you see, I'm from Naval Intelligence."

Forsythe conducted the two men into a small but comfortable office a mile or so away.

"Please sit down." He sat down behind the desk and faced them. "I take it that you have no idea why you are here?"

"None at all, sir."

"I see." He reached down and produced something from the desk drawer. "Perhaps, first, you should look at the evening paper. Front page, the headlines should be enough."

Randall took the paper and felt the muscles in his hands lock painfully.

DESTROYER RAMS SUBMARINE. SUBMARINE CREW FEARED
LOST

The Admiralty announced at 17.50 hours this evening that the destroyer Mentor had collided with the submarine Euphrates at a point approximately four miles due East of Seaforth.

Salvage and recovery vessels are being rushed to the area but little hope is entertained for the crew of the submarine.

Naval divers report that the vessel, badly holed, is now lying on its side at a depth of ...

Not trusting himself to speak, Randall handed the paper to Cooper, dully aware of a trickle of sweat crawling down his temple.

Cooper read the headlines, then put the paper on his lap, his hands too unsteady to hold it in front of him.

Forsythe waited politely for him to finish, then he said, "Well?"

Randall felt his cheeks burn suddenly. "What the hell do you mean—well?" He fought for self-control. "Sorry, sir, but I think an explanation, if any, should come from you. What is this, some sort of security stunt?"

"Not a stunt, Captain. Call it a transition."

Randall half rose from his chair, then lowered himself into it again. "Are you trying to tell us we're dead and that this is some sort of afterlife, heaven, hell or what-have-you?"

"You're off course, Captain, but close enough to accept an explanation. Briefly, you were rammed, you sank and, because of bad weather, salvage was not attempted for nearly two months. When the weather finally settled, a war-scare intervened and again salvage was abandoned. Actually, Captain Randall, you were beneath the ocean a very long time. So long, in fact, that medical science had taken giant strides and we were able to resuscitate you and nearly all your crew."

Cooper rose, his face flushed. "That's a biological impossibility! What sort of fool do you take me for?"

Forsythe looked at him without expression and produced a printed sheet of paper. "This is a report of conditions in your vessel when it was finally salvaged, conditions which had prevailed over a considerable period. As you will see it is written in simple terms with a minimum of technical and chemical references." He handed it to Cooper. "Incidentally, I am afraid that later we shall have to call upon you to reduce it to even simpler terms for the benefit of your crew."

Cooper finished the paper and passed it to Randall. "There is still a

damn lot which doesn't fit—sir. Look, we walked through Seaforth, we had a drink in a pub, everything was the *same*."

Forsythe looked at him with faint compassion. "Our psychologists advised us that an abrupt transition from the far past to an incomprehensible future might have dangerous mental repercussions. Acting on their advice, therefore, we are bridging the gap from past to future by easy stages. Seaforth—the Seaforth through which you think you have walked and, incidentally, berthed your vessel—is an illusion created by special techniques for your personal therapy. If this startles you, I am afraid I must startle you even more because you are not on the planet Earth."

Randall, who had been dividing his attention between the report and the other's words, looked up. His face had a hard and strangely determined look. "In my time I have been called both a cynic and a materialist; I don't know if either description applies now, but I suspect a catch."

"Catch?" Forsythe's eyebrows rose. "Please, I am not familiar with all the idioms of your period. Kindly explain." Randall took out his pipe, inspected the bowl and knocked out the ash on a convenient ash tray. "If your story is true—and we have no evidence as yet—you want something. What point was there in resuscitating an entire submarine crew who would not only be completely out of touch with your culture but could contribute nothing to it? We are here, therefore, either for purposes of study, as specimens, or for some more devious purpose which you propose breaking to us gently."

Forsythe straightened in his chair, some of the color gone from his face. "You are an astute man, Captain Randall, too astute; the historical department miscalculated your reactions badly. I was not prepared for this."

"We have a certain native cunning," said Randall nastily. He lighted his pipe and puffed smoke defiantly. "Suppose we get down to something honest."

Forsythe met his eyes for a brief moment, then shrugged. "Very well, Captain, I have no alternative but complete frankness. Some years after your—ah—demise, certain events took place which compelled us, as a safety precaution, to make certain psychological adjustments to our

personalities. This practice has continued for several generations. We have now run into certain difficulties which, owing to these adjustments, we cannot handle. Do I make myself plain?"

Randall stared him out. "I can add two and two, thank you. I can also juggle, in a mild way, with equations. I find it significant that you should select the fully trained crew of a fighting ship. I assume, although I may be mistaken, you have also restored the ship as well."

Forsythe shifted uncomfortably in his chair, refusing to meet the other's eyes, then he sighed. "You are correct. We wanted an unadjusted nucleus as a basis for resistance. We wanted a fully equipped fighting machine, however archaic, to give the enemy food for thought and perhaps curb his warlike intent."

"You are desperate or an optimist."

"Both, I am afraid."

"You are being invaded?"

"The enemy already holds the northern continent of this planet. We were compelled, despite offers of negotiation, to evacuate and, even then, many thousands of lives were lost. The enemy is now consolidating his gains but we expect an attack on this, the southern continent, at any hour."

"So you propose employing us as mercenaries." Randall's face was flushed angrily. "Throwing us at an enemy against which our assault weapons would be about as useful as stone clubs against an armored column."

"We will make available all the scientific facilities at our command. We will provide robots, scientific interpreters and give you a completely free hand as to how you conduct your defense."

Forsythe suddenly rose, his face intense. "This is a survival question, Captain. We do not apologize for trying to save the race by any means to hand. We have restored your lives which were cut short and, in your case, returned to you an additional fifteen years. We can promise you, at least, a further seven hundred years of active virile life with modern medical techniques. On top of this, we are prepared to pay you and your men one

hundred times their original earnings in present-day currency. There will be no overhead, no taxes, clothing or food, and the entire resources of medical knowledge will be provided free of charge. Likewise, recreational facilities, period entertainment, liquor and food can be laid on at your request and when required."

He lowered himself slowly back into the chair. "I am a little vague as to the social and moral structure of your period but a considerable number of our women have already volunteered to make themselves available without reservation should you require it."

Randall took the pipe out of his mouth and studied the slow curl of blue smoke rising from the bowl. His face was no longer hard but thoughtful, and, in truth, he was feeling vaguely chastened.

"You're desperate." It was a statement.

"We have our backs to the wall and, owing to adjustment, cannot lift a finger in self-defense. So deep does this adjustment go that we cannot even adapt the robots for fighting purposes. In this field you may be able to help us after appropriate instruction."

Randall replaced the pipe between his teeth and smiled faintly. "We are still lacking in proof as to your claims."

"That is easily confirmed. Pull back the curtain and look out of the window."

Chapter Two

RANDALL LOOKED around the room dubiously. It looked like a barrack room; it even looked like a *familiar* barrack room. It looked like the recreation room, Howard block, at Westcot Naval Barracks.

The barracks themselves had looked the same when he had entered. Guards at the gates, the ancient figureheads, the statue of Admiral Culver with the same bird droppings on the cocked hat and a chip of stone out of the left ear.

He was compelled to remind himself and, at the same time, doubt the illusion. This was not Howard block at Westcot Naval Barracks; this was an illusion engineered by the future for the benefit of the past.

He watched his crew file in, burdened with duffel bags and hammocks, and find themselves places on the wooden benches. *His crew*. He was aware of a sudden stir of compassion, of a curiously paternal sense of protection as he looked at them. They were the trained complement of a fighting ship and they didn't know. They didn't know that Seaforth, the bars, the girls, the fathers, mothers and wives had gone forever.

The familiar mutterings, grousing and general swearing seemed suddenly infinitely poignant and faraway, like a distant burial hymn.

"Move up. You want all the blasted bench?"

"That happens to be my bloody foot you're resting your bag on."

"Wonder if we'll get shore leave—"

"More likely a blasted inquiry."

Randall looked at them with a deeper understanding and wondered. Boone, who had a girl up north somewhere; Crouch, who had an invalid mother in an institution and visited her every leave armed with a huge bunch of flowers and a case full of gifts.

Heston? No real worry about him with his low forehead, thick brows and aggressive jaw. If there were women, beer and brawls, Heston would be untroubled. Heston was a damn fool ashore but a good, reliable man at sea. Randall tried to recall briefly how many times he had had the man extracted from various jails.

C.P.O. Duggan, solid as a rock, no relatives and, therefore, little to mourn.

Some would benefit: Dusty Miller, who had an unfaithful wife. Larkin, the Romeo, who was constantly pursued by maintenance orders or irate parents.

Randall suddenly realized that the men were looking at him expectantly and switched on the address system.

Automatically and without thought he began with the familiar ship-address: "Now hear this, now hear this. Captain speaking." He drew a deep breath, suddenly aware of the expectant faces. Why hadn't he

prepared for this, made notes?

"As most of you are aware"—did that sound pompous?—"things are not quite as they should be. In order to explain the situation, however, I must begin at the beginning.

"We must begin with the destroyer *Mentor*. At thirteen hundred hours on the 11th of December during a practice exercise in home waters, there was an explosion from causes unknown. This explosion killed two men and seriously injured another four. It also completely wrecked the radio room.

"The *Mentor*, therefore, had no means of radioing her course or position and, more important, receiving information.

"Naturally, her captain, with four seriously injured men aboard, immediately altered course and made for port at full speed.

"At sixteen hundred and twenty-three hours, at a speed of thirty-eight knots, she collided with a submarine which sank almost immediately. There were no survivors."

He paused and looked at them directly. "The submarine involved was our ship—the *Euphrates*."

There was a murmur from the men, a faint grating of sound like a far wave on distant sand. He held up his hand for silence.

"Allow me to continue, please. The bows of the *Mentor* completely sliced through the conning tower of the submarine, but below this, damage was confined to a few minor leaks. In the roll back, after the impact, however, the submarine was again holed, this time astern. Water poured into the rear compartment, completely flooding it.

"As you all know, however, the *Euphrates* was the most up-to-date vessel in its class. The automatic safety devices immediately took over, slamming the watertight doors shut and self-sealing the reinforced bulkheads.

"Relatively speaking, the vessel was almost intact. Inside, however, damage was serious indeed: the nuclear motors had been unseated and the shielding fractured in several places. On top of this, a torpedo had been wrenched apart and the chemical contents of the warhead were

exposed to the slowly rising salt water... salt water already slightly radioactive.

"Now I want you to think about this. You have all, I am sure, been to museums and similar exhibitions, and seen small animals preserved in bottles of fluid. Precisely similar conditions applied here. Although we all perished—I will repeat that, *although we all perished*—our bodies remained perfectly preserved in a vessel which, owing to the conditions I have mentioned, had become exactly like one of those bottles of fluid."

He paused and cleared his throat quickly. "To return to events immediately after the collision. Of course attempts were made to raise the vessel, but persistent bad weather defeated every salvage attempt. When the weather calmed, there was a war-scare and salvage was once again abandoned. Two further efforts followed, again abandoned for similar reasons.

"Time passed—a very great deal of time. This delay was, however, in our favor. By the time the vessel was finally salvaged, medical science had advanced sufficiently for the doctors to do something about our perfectly preserved bodies. They were able to get our hearts beating again, our lungs breathing and the blood circulating in our veins. As you see, we are all exactly the same as we were before although"—he managed, he hoped, a convincing smile—"one or two of us seemed to have come out of it quite a few years younger." He stopped, experience telling him that enough had been said for the moment, and turned to the Chief.

"I think this might be an opportune moment for a special issue of rum. Those who wish to smoke may do so."

"Aye, aye, sir."

Randall lighted his own pipe with relief and watched the men covertly. All of them looked dazed and a large number were pale, but clearly all of them were thinking deeply.

He waited until the rum was finished and its effects felt, before he stepped forward again.

"You will naturally want to hear the rest, but first, let me assure you, I have no doubts as to the courage of each one of you. This news was a great shock to me and I know it has been a great shock to you.

"We must all remind ourselves again that a great deal of time has passed. I am sure, however, that when we went down our wives, our mothers, fathers, friends and loved ones mourned our passing with courage and fortitude. We can only show our respect by displaying the same courage, honoring their memories, but realizing that they passed from this life a very long time ago."

He paused briefly. "Despite the strange and possibly frightening world in which we shall soon find ourselves, we must bear in mind that we are in one respect fortunate. Some of our shipmates were beyond revival and didn't respond to medical treatment. They were Able Seaman Albert Brown, Ordinary Seaman Charles Underwood, Leading Seaman William Fisher and Petty Officer George Grundle. Later a memorial service will be held for these men..."

He went on, warily, and with circumspection, to explain the kind of conditions in which they would find themselves. He explained the circumstances, why they had been resuscitated and what the government of the age expected of them. Then he said, "You will have to sign on again, swearing allegiance to a new government. This is not an order but if you wish to stay with the ship and your familiar shipmates this is the procedure. Needless to say, I shall remain in command. You have twenty-four hours to consider the suggestion."

He turned and left the room, trying to act as if everything were normal.

Once outside, however, he gave an audible sigh of relief. Thank God that's over."

"I think you did a damn good job, sir."

"Do you, Number One? Thank you, but I've left the really rotten job to you. As you know I have to go into the city with Forsythe. While I am gone I want you to set yourself up as an advisor to answer the men's personal problems. Oh, and yes, you'll have to tell them that things have changed outside, too. Once they have accepted the idea, let them out but take it easy. Don't let them go charging into the open like a football crowd, but pull back the curtains and let them have a look out of the window first. As you know, this is not an easy world to take."

Cooper saluted, slightly pale. "Anything else, sir?"

"Nothing I can think of at the moment, but you could have a talk with C.P.O. Duggan, take him into your confidence, show him you're depending on his cooperation. Unless, of course, you want to handle this by yourself and in your own way."

Cooper answered, "No thanks, sir," with considerable feeling.

Randall came out of the side door of Howard block slowly and a little hesitantly. As soon as the door closed behind him, however, the building seemed to blink. It flickered from the weather-stained bricks of Howard block to a shimmering blue and silver spire of exquisitely blended curves and angles.

Randall knew nothing about architecture but the beauty of the structure caught at his throat. Despite his reaction, he shivered. He was an alien on an impossible world. An intruder from an age as remote as the crusades and just as inaccessible.

He had glimpsed, with considerable shock, some of this world before but here, in the open, with the impossible structure behind, he was aware of a desire to turn and run.

He forced himself to calmness with considerable effort and studied his surroundings.

The building stood completely alone on a low rounded hill and, directly in front of him, the land undulated away to a hazy horizon. Meadowland, rural and peaceful, but like nothing on Earth. The grass was not green but golden, the bushes and trees, which appeared to shimmer, had a curious suggestion of fragility and were a gentle blue.

To his left, the land sloped gently downward to a wide bay and an ocean of unnatural emerald green. The sky was also green but of a paler shade. A few wispy white clouds, so motionless they appeared painted there, hung close to the sea near the horizon. High in the sky, not quite at its zenith, was a huge orange-colored sun.

He was aware of a strange resentment. This wasn't true, he felt. This was some sort of challenge, a cake and gingerbread land from a fairy story in which someone expected him to believe.

They were skilled illusionists, weren't they? No doubt, at the touch of a

switch they could change the whole thing to a hell of shrieking wind, blown spume and black rock.

Something appeared or descended—he was never quite sure which—beside him and, much to his inward annoyance, he shied like a wild horse. "What the hell!" He found himself glowering at Forsythe.

"Did we startle you? I'm so sorry. Forgot you were used to noisier and more exuberant forms of transport."

Forsythe reclined in the long seat of a thing which shimmered and looked like a soap bubble. It was slightly longer than a normal car and possessed no visible means of propulsion.

Beside Forsythe was another man, a man with a long thin nose and bright, intelligent, beady eyes. He wore what Randall described to himself later as a period suit, black coat, drain-pipe trousers and a high white-winged collar. Randall's grandfather had worn one like it, around 1890... These people of the future must be a little eccentric.

Hop in.

The shimmering skin of the soap bubble parted and Randall stepped with some trepidation through it. Inside, he discovered, was ample room for at least ten people and he lowered himself cautiously into one of the reclining seats.

Forsythe made introductions. "This is Lyne Relf, the nearest thing we can get to a Minister of Defense. More important, however, are his qualifications. He's an expert in robotics."

"Robotics!" Randall was aware that his face had blanked stupidly, feeling that he must look like some damned aborigine.

Relfs thin face cracked into a smile but it was a friendly one, uncritical and without patronage.

"You'll learn," he said, gently. "Well put you through a quick course of instruction. It is not a difficult subject: construction is the complicated part and we don't expect that."

"Even so—"

"Captain Randall." Despite his appearance, Relf had a forceful personality. "Captain Randall, allow me to explain, please." He leaned forward. "We know robots and we know you. According to records of your period you ran what was popularly termed 'a happy ship'. Your men like, respect and come to you in trouble. Believe me, if you can handle men, you can handle robots. The robotic brain is just as sensitive, although far less devious than its organic human counterpart. It responds excellently to your kind of quiet authority."

Randall scowled at him in a worried kind of way. "You make it sound very cozy and comfortable. Without any offense, I met commanders like you in the war, just as casual, just as blandly confident. 'Want you to have a go at this cruiser, Randall. Nothing to it—take a look at the chart. She's anchored here. Of course, you'll have to wait for high tide to scrape under the anti-submarine nets but apart from that.'" Randall stopped.

Relf laughed with genuine amusement. "It's not as bad as that, Captain. In any case, judging by your war record, you had some striking successes."

Randall said, guardedly, "I'm prepared to listen."

"Excellent. I must confess, without flattery, you are far more intelligent than we expected. Our knowledge of the past is limited and research into it, owing to certain unpleasant periods, is discouraged."

He smiled. "I will not oversimplify this matter. The modern robot is a mechanical intelligence with an immediate recall and a capacity for retention far beyond the human. It is self-deciding, alert and similar to its human counterpart except that it is lower on initiative and creative imagination. It develops, after some months of operation, a distinctive personality with likes, dislikes and limited prejudices. Very frequently it develops or acquires a sense of humor, an appreciation of music, art, or verse, or an intense interest in a particular science or trend of research."

Randall frowned worriedly. "What about the loyalty factor?"

"The robot, above all else, is a supremely logical intelligence. It appreciates, without prior instruction, that man is the creator and that it is dependent upon man for its continued existence. It is, therefore, loyal almost to the point of embarrassment and often displays considerable affection for a particular master."

Relf paused and smiled. "Don't jump to hasty conclusions, Captain. It is not obedient to the point of stupidity. If it is given a dangerous assignment, it will demand, rightly, logical reasons for undertaking it."

Randall nodded. "What do they look like?" Forsythe answered the question. "It depends on the purpose for which they were constructed. Shall we demonstrate now, Mr. Relf?"

"Why not?" He smiled at Randall. "This particular one is apt to show off periodically and has an unfortunate musical bent but like all robots is highly efficient." He settled himself more comfortable in the reclining seat. "G2. Back to the operational building. Don't go above two thousand and take it steady."

"Yes, sir," said a pleasant human-sounding voice. "Back to base, ceiling two thousand. Five hundred knots, okay?"

"Don't show off, G2. You've no idea what a knot is."

"True, sir, but I recognize the word as period and it is appropriately nautical."

The soap bubble began to rise and Randall found himself clutching the edge of his seat. "This is a robot?" His voice sounded hoarse.

"Transport type, yes. Don't worry; you are far safer with a robotic pilot than a human one."

Randall favored him with a rather sickly smile and tried to look relaxed.

A few minutes later they passed over a wide river, as emerald green as the ocean, winding slowly between the tall blue trees, and Randall wondered numbly if he were still dreaming.

He became aware of faint but recognizable music, remote, strangely poignant, yet somehow outside familiar instrumentation. What was it? Oh, yes, Strauss's *Tales from the Vienna Woods*. He looked furtively about him for the source of the music but was unable to find it.

"G2," said Relf, coldly. "If you switch to grand opera on this trip I'm going to deactivate you. I am already heartily sick of everlasting repetitions of *Aida*"

"No fear of that, sir. Today I feel pastoral."

"Stay that way, G2," said Relf, warningly. Randall closed his eyes. This was an impossible dream, quite impossible.

Before he could get down to reasoned thinking, however, Forsythe said, "Wake up; here we are."

Randall had time only to glance at the incredibly vast and strikingly beautiful city before they hurried him from the roof park to what, apparently, was a bare room with wide windows.

"Office appointments, sufficient chairs, data and pertinent accessories," said Relf. Then to Randall: "House-bet."

Oddly shaped chairs and a white arc-shaped desk with a pile of documents on it seemed to appear mistily from nowhere and suddenly solidify with a faint crackling sound.

Before Randall could comment, however, Relf sat down behind the desk.

"Let's get down to business. Please sit down, Captain Randall."

He sat, with a casualness which he was far from feeling. "Now." Relf put his elbows on the desk and linked his thin fingers loosely. "History in brief. As you have no doubt concluded, a great deal of time has passed; the race of man has expanded to the stars and created an empire consisting of twenty-five planets. This, the planet Cede, is one of them and the outermost.

"Some months ago, an alien invader landed unobserved on one of the uncolonized peninsulas of the northern continent. We presume he landed by ship and set up matter-transmitters to funnel through supplies, but we are not sure. We assume, but cannot confirm, that technically he is on about the same level as ourselves. We know, but not in accurate detail, that he is humanoid."

He paused. "The first we knew of the invasion was a sudden attack on one of our northern and smaller cities. An attack which wiped out almost a quarter of the population." Suddenly his face flushed. "Men, women, children, slaughtered without provocation. People, totally incapable of

defending themselves, but they killed them just the same."

"They knew!"

"Oh yes, they knew." Relf extracted one of the documents from the pile on the desk. "We have been checking their communication bands since their first attack. Obviously they despise us: they make no attempt to code their communications and, for a linguistic master-computer, translation was relatively simple. Among a large number of irrelevant communications was this." He handed the document to Randall.

To: Supreme Command

Direct Combat Section

From: The Commander

5/2 Theater of War Sir:

A report from combat/psychology (herewith) assures me that the race (Human) is incapable of defending itself and I have therefore detached a Gwine [approximately a battalion—Translator] and Scron [about seventy war machines and/or warrior robots] from the 27th Army for this secondary theater of war.

Your Lordships will appreciate that in view of the Humans' inability to defend themselves the force is not only adequate for the occupation of this planet but sufficient for the conquest of the entire empire of twenty-five planets.

Furthermore, the occupation of these planets would secure a defensive line for the protection of flanks in the 19th salient.

In accordance with regulations, two vats [?] accompanied the advance groups and construction of a bed [?] is nearly complete.

Obediently,

Zern [Phoentic—Trans.] Commander.

Randall handed back the report without comment. "We tried," said Forsythe. "We called them. We realized that they were intelligent enough to translate and we got this back in almost perfect English."

Relf selected another document. "Read it."

To: The Peoples of Earth and Colonies of Their Empire. Sirs:

We, the Species of Nerne, cannot entertain, nor enter into, the abstract negotiations you propose. As, in any case, our expansion program includes your worlds, negotiation would be pointless.

Your offer of surrender is likewise impractical since it includes the safety of prisoners. Our administration can neither support nor reshape itself to service of large numbers of prisoners.

The Species of Nerne, although—abstractly—applauding the ethics motivating your offer, must point out that this is, to our species, a survival question which cannot be obstructed or delayed by abstract moralities.

Colkon

Commandant (27th Military Expansion Group)

Randall looked up from the document. There was something curiously flinty in his eyes, flinty and cold.

"It looks as if they want to do it the hard way," he said.

Chapter Three

THE GREEN SKY was darkening when Forsythe showed Randall to a huge bare room, three-quarters of which seemed to be window.

"Don't look alarmed; just tell the house-bot what you want. It's quite intelligent and furthermore it expects you. You'll have to get used to it, you know."

Randall found himself alone, staring through the vast window at a city already jeweled with light.

"Anything you require, sir?" said a soft polite voice.

It was an effort not to jump. As Forsythe had reminded him, he had to get used to it.

"I could use a whisky and soda but I guess that's out of your line."

"On the contrary, sir, I've been reading up on period liquor. I'll supply the two separately and you can do your own blending. Anything to eat, sir?"

Randall realized suddenly that he had not eaten for several hours. "How about a steak—with a coat of fried onions?" That ought to beat the damn thing, he thought.

"Coming up, sir. Some soup first, yes?"

A table appeared, covered with a white cloth, knives, forks, a small basket of white rolls, a dish of some dark liquid which smelled remarkably like oxtail soup.

"How the hell do you do that?" inquired Randall, suddenly irritated.

"The table and so on, you mean, sir? I'm afraid I'm not an expert, sir, but, as I understand it, the atomic outline is incorporated in the structure of each room. The tables, chairs and beds are in the room but in an attenuated form. When you ask for a bed or a table, I apply power and the outline, to all intents and purposes, becomes a solid. Does that make sense to you, sir?"

"Not really but I get the idea. What about the soup?"

"Direct from the kitchen, sir. Nothing complicated about that: we just deliver it a little more quickly than the perceptions of the human eye."

"Thank you." Randall sat down to a lonely and improbable supper. When he had finished, a bed appeared. It was so low as to be almost part of the floor but incredibly comfortable.

The stars were visible through the huge windows, vivid and wholly unfamiliar constellations with no visible point of reference. Watching them, he fell asleep.

When he awoke it was barely dawn, but a steaming cup of tea appeared on a small table by the bed before he had finished rubbing the sleep out of his eyes.

"Good morning, sir. You slept well?"

"Very well, thank you." He looked at the tea. "Do you drink this stuff now?"

"You mean mankind, sir? No, the laboratories had to build that up from basics. Is it to your liking?"

Randall sipped cautiously. "Not bad. Can you do the same with coffee?"

"Oh, yes, sir. Mankind still drinks coffee."

Randall finished the tea and put the cup down. "Can I get a shave anywhere?"

"Shave? Yes, sir, if you'll lie still... excellent. There we are, sir."

Randall ran his hand over a perfectly smooth chin and scowled. "Just how?"

"Growth inhibitor, sir. I understand it's some sort of high frequency sonic device which not only causes the bristles to break off, sir, but also inhibits root growth. Should last you about six months, sir. After-shave?"

Forty minutes later, Randall, washed, shaved and fed, was sitting in a comfortable chair which the house-bot had provided for him. He had breakfasted well on eggs, bacon, liver and toast with marmalade, but hesitated to ask whether mankind ate these things now. The thought that the whole meal might have come from "laboratory basics" would have spoiled his enjoyment.

There was a polite cough. "Excuse me, sir, the period naval expert is here."

"Period naval—oh, yes, I remember something about that. Show him in, please. "

"Excuse me, sir, forgive the reminder, but the expert is, like myself, a robot. Has it permission to enter, sir?"

Randall felt himself pale. "Er—yes, yes—sure—"

He had no idea what he expected to see. He had a vague picture,

derived mostly from the television programs of his own age, of a huge, lumbering metal contrivance.

The thing that entered, however, resembled none of these things. It looked like—his mind fumbled for similes—a beehive; yes, that was it, a bronze-colored, corrugated beehive. A beehive which floated—underjets, perhaps—some three feet above the surface of the floor.

"Captain Randall, I have been placed at your disposal. I am robot S/4/63Y."

Randall scowled at it uneasily. The voice was deeply male and well-educated, no doubt recorded. The thought was without comfort. The thought of conversing amiably with an animated beehive was not only disturbing but downright grotesque. He didn't belong in this damned impossible and idiotic age.

To steady himself, he took out his pipe and began to fill it slowly and as he did so Relfs words came back to him: *Believe me, if you can handle men, you can handle robots. A robot would respond excellently to your kind of quiet authority.*

Good God, he'd only just got it; it had only just sunk in. Relf had been trying to tell him that there was very little difference in the reactions of the robotic brain as opposed to the human one. It not only made sense, it helped him personally. He must think of this thing, not as a super-intelligent instrument (which it undoubtedly was) but also as a rating under his command, and it was that, too. He was going to treat it like one, damned if he wasn't—before he lost his nerve again.

He lighted the pipe and looked up.

"Does this mean you have been placed under my command without reservation?"

"It does, sir."

"Then I shall expect you to sign on like any other rating. Furthermore, although you are a specialist, you are not, I take it, an experienced sailor?"

"No, sir."

"In which case, you must start at the bottom and must enter the service as an ordinary seaman. Understood?"

The robot said it understood.

"Good. Now what do you know of the structure of the Navy, rank, rating, et cetera?"

"Nothing, sir."

"I shall expect you to acquaint yourself with it. Again, you will be working with a different type of man, the type of man who will regard you as an oddity and probably say so in no uncertain terms. Can you take that?"

"I think so, sir, yes."

"Good. Give as good as you're given, preferably with a humorous twist, and you'll probably get along all right. Oh, another thing: none of these men—and that probably includes myself—will ever remember your number. You will, therefore, be known as Ordinary Seaman R. Austin as from now. So that you may be easily recognized I want you to inscribe that on yourself in large white letters: 'O stroke S Austin, R.' Clear?"

"Perfectly clear, sir. I can acquaint myself with naval ranking by tapping the city's historical information banks. It will take about two minutes—I have retentive memory cells, you see. Again, I can inscribe name and rank on my person by electrical impulse—thus."

Randall watched the lettering appear with what he hoped was casual unconcern. He supposed he must get used to this sort of thing quickly.

"If you will excuse me, sir."

There was a faint purring sound, then silence. After a brief period, the robot said, "I am now familiar with the structure of the naval service of your period, sir. Would you wish me to repeat it?"

"I'll take your word for it, Austin. At the moment there are more important things. What is the state of the ship?"

"As on the day of trials, sir, without fault, and completely refitted. The

experts have many ideas for improvements, sir, which will be submitted to you in due course."

"And the munitions?"

"None, sir. They had deteriorated beyond safe use. However, they can be replaced or, if you prefer it, something more violent substituted."

"One thing at a time. At the moment, have them replaced. Does this age understand explosives?"

"Chemical history does, sir. Your ammunition holds can be filled in approximately half an hour and that includes the torpedo tubes. Will you continue with ancient compressed air, underwater missiles, sir? We have some smaller and far more efficient."

"Normal torpedoes with a normal warhead, please, Austin."

"As you wish, sir."

Randall smiled faintly. "You sound disappointed, Austin. So, since you have a logical mind, I will be logical. You probably have in mind more advanced and far more destructive missiles which came into being just before man decided on peace for all time. No doubt these missiles are faster, have a greater range, are self-seeking and are several times more destructive. How big are they, Austin?"

"About the quarter of the size of yours sir. I estimate you can carry—"

"They won't fit our torpedo tubes, will they? This will mean interior adaptation, rebuilding, all of which will have to be related to buoyancy, speed—above and below surface-diving and surfacing. Which method is going to be the quickest?"

"I had overlooked that angle, sir." There was considerable respect in the robot's voice.

"That is because you are not yet a sailor—and let me assure you. You cannot become a seaman from text books or even convenient memory banks: It's a question of experience. No doubt, Ordinary Seaman Austin, your mind is brimming with ideas for replacing the ship's motors with something modern, smaller, a hundred times more efficient and one tenth

the weight. This would play hell with our diving, upset our displacement and require the alteration of our tank capacity to meet our increased buoyancy. Am I making myself plain?"

"Too plain, sir. With respect, I am learning a great deal."

"Good. Don't misunderstand me, Austin. I want your ideas and I shall ask for them, but only when you, yourself, can relate them to experience."

"Thank you, sir. I respect your advice and shall try to act accordingly. I appreciate—"

The robot never finished the sentence. There was a curious snapping sound and Forsythe appeared in the middle of the room.

Randall could see that it was not really Forsythe but some sort of projection. The general picture was clear and three-dimensional, but the outlines were fuzzy and a little blurred. The image gestured. "Thank God I found you so soon. Can you get down here right away?"

Randall puffed smoke. "What's the panic?" Forsythe's eyes were suddenly bitter. "Even *we* don't panic, Randall; it's just that we're helpless. The enemy has launched an attack on the southern continent!"

When Randall, guided by the robot, reached Relfs room, a complete wall was taken up with a huge map. There were other men whom he had not met before and all looked pale.

Forsythe stepped forward. "Sorry I was abrupt but we're in a spot. We'd hoped for several weeks before the enemy consolidated his position but he's already on his way."

Randall thought, *He should have been clobbered before he could consolidate*, but he said, "Where is he?"

"The red spot at the northern tip of the continent."

Randall studied the huge landmass which was presumably the southern continent and saw the small red spot.

"What speed is he making?"

A light flashed on the map and words appeared: *Four point nine*

kilometers per hour.

"What is he doing—walking?"

"Did we forget to tell you!" Relfs face was suddenly pale. "You must see, see for yourself. This is a deliberate terror weapon. As you will appreciate, it would be far easier to strike us from the skies with missiles, even bacteriological warfare but, no, with limited resources, he resorts to panic measures. This way, the refugees spread alarm and despondency in the reception centers. We can see him coming—he must know we can see him coming—slowly, but not slowly enough. Clearly, as you see, he is making for Markstown, here. The journey will take him four days but we cannot evacuate seven million people in four days. There are no roads or railroads as in your age. For transport we rely on matter-transmitters and this city has ninety. The time required between each dispatch is twenty minutes. The power required is enormous and each time the projector devices must be built up to maximum power. In simple arithmetic, how long would it take to empty the city at this rate?"

"We have, of course, a limited supply of robotic fliers but this will increase the rate of evacuation by only five percent."

He made a gesture and the map vanished abruptly. In its place a three-dimensional picture appeared. The picture showed a wide, tree-lined square surrounded by the now familiar breathtakingly beautiful architecture of the age.

There were long queues of people in the square, waiting patiently before what looked like large red, dome-shaped telephone boxes.

Randall assumed, at once, that these were matter-transmitters. What struck him first, however, was the suggestion of a fancy dress ball. The people wore the clothes of almost every age known to history: there were togas, robes, leopard skins; there were Harlequins, cowboys, clowns, Vikings and Elizabethan dandies. What the hell was the matter with these people?

Before he could answer his own question, however, something happened. The orderly queues fragmented and swirled outward like water, leaving the center of the square empty. Bewildered, he watched them racing for the exits to the square which, despite their width, could not accommodate all those thousands of running people at once. Congestion

built up and slowed them, but despite this there was no real panic, no kicking, gouging or biting in the effort to escape. In truth there was a great deal of individual and mass courage. The gaudily dressed men, in their silk, satins and colored robes, formed solid lines in front of the women. Hundreds of children were passed by willing hands above the heads of the struggling people.

What the devil was happening? Randall had the curious feeling that he was somehow involved in the escape but did not know the reasons. What had these people heard, seen or sensed?

Then he saw it and he stiffened as if icy water had been poured down his back.

In the center of the square was a huge bulge; dust was rising, cracks and fissures appeared in the glass-like surface and there was a rending sound.

As if this were a signal the majority of the men detached themselves from the escaping crowds and formed a circle around the disturbance.

Randall saw at once that this was an act of courage, of deliberate self-sacrifice far beyond the ordinary. The men were forming a human barrier to enable the others to escape, a barrier of human bodies almost ten deep.

From the bulge in the center of the square, dust and soil geysered briefly upward. Something rose out of the dust, out of a hole in the ground—something which looked like a huge snake but was obviously constructed, most likely of metal or plastic.

It rose high above the human barrier and extended a nozzle which ejected a long spray of curiously scintillating vapor.

Almost instantly everything in its path—the ground, the air, the facing buildings—burst into bright smokeless flame. Part of the human barrier vanished and beyond—Randall felt his stomach twist painfully—people were catching fire.

He saw desperate, panic-stricken people staring horrified at blazing hands and fingers. He saw living torches fling themselves into public fountains or rolling over and over in a desperate effort to smother the

flames.

The nozzle turned again but the picture mercifully vanished before he could see more. "Well?" Relf's face was colorless.

Randall looked at him without speaking, he could find no words.

Relf sighed. The same thing will happen in Markstown in four days. Thousands will take to the country, but it won't really help. It is five hundred kilometers to Welby, the nearest city, and the refugees will have to cross the Sindah Mountains, which are only slightly smaller than Earth's Alps. In any case, the thing will keep following the refugees as they retreat."

Suddenly Relf extended his hands in front of him. "We can't fight, Randall. Don't you understand, *we can't fight*." His emotion was so intense that Randall could almost see the manacles on his wrists.

He dropped his hands wearily to his sides. "First we stopped our fighting each other by psychological methods; then, to make quite sure, suppressive genetic measures were introduced... I suppose we deserve this. We made it so damned effective that we can't even give the robots orders to fight for us."

"What was that thing?" Randall was unable to recognize his own voice.

"What—oh, the alien vessel, you mean? I suppose one could liken it to your vessel." He shook his head quickly as if to clear it of unpleasant memories. "I am sorry. I am not myself today and I forget that you have not been instructed in present-day technologies. The method employed is not new; we have used it ourselves for years in mining, sinking shafts for building purposes and similar operations. The vessel is fitted with a device which warps the atomic structure of the soil or rock through which it passes. The soil does not cease to be soil or the rock any less rock but its cohesion is weakened. It becomes to all intents and purposes molten, or more correctly, glutinous, as no heat is involved. An object or vessel may be slowly forced through this semiliquid substance around the device."

"How big is this vessel?" There were hard lines around Randall's mouth and his mind seemed to be racing.

Relf made a gesture and another picture appeared. "Let us see now, in

your measurements—about two hundred and fifty feet, give or take ten. As you will observe, it is very much like your vessel except that it has no superstructure."

"Surely the pressure is enormous."

"We now have atomically constructed substances of unbelievable strength but, yes, they have limits. Maximum depth for this kind of vessel is about eight hundred feet."

"It is manned?"

"Yes. The aliens have no robots as we understand them. They have a large number of programmed machines but no reasoning mechanical intelligences. In that field we are far ahead of them. "

Randall frowned; his mind was still racing and a germ of an idea was already growing rapidly. "How many robots of Austin's type can you spare me?"

"We have allocated you twenty. Why?"

"No matter. It is enough for the moment, but I'll need at least three more for an intelligence service."

"Intelligence service?" Relf looked blank. "Something capable of tapping the enemy communications and breaking complex codes should the enemy use them; also to code all messages to me. I also want accurate charts of this planet's entire ocean."

"You're not going to try to meet this vessel on its own terms?"

"Good God, no! There are easier ways of committing suicide."

"Then what—?"

"You brought me here for a purpose, to fight a war. You can't fight a war without some sort of organization behind you." He glanced at his watch. "Austin, I want those twenty robots in my room as fast as they can get there. Tell them they will join the Service under the same terms as you did and they'll be subject to the same discipline. Advise them beforehand that they will be required to specialize and that some of the specializations

will be dangerous. If they prefer to seek less hazardous occupations, they need not come."

"What are you going to do?" Relf looked both hopeful and worried.

Randall did not appear to hear. "Oh, I'll want medical services ashore and an S.B.A. at sea unless we can get a doctor."

"You'll have our entire medical service at your disposal. What is an S.B.A.?"

"Sick bay attendant, someone with a good grounding in first aid. Oh, sorry, I didn't answer your question as to what I'm going to do. I have an idea but I can't put it into action without prior consultation. The robots can give me the right information or put me in touch with someone who can, can't they?"

"You seem in great haste."

Randall looked at him. "According to you I have four days. It isn't a lot of time, is it?"

Relf's eyes widened. "You're going to save Markstown?"

"I'm going to try."

"I don't like to discourage you but it's a tremendous task. Apart from meeting him in his own element—for which neither you nor I have battle techniques or suitable weapons—the enemy is virtually unassailable."

Randall showed his teeth briefly. "I come from a rougher age." He turned. "Come on, Austin, we have work to do." At the door he turned. "I have studied history, Mr. Relf, and I don't think we have ever had barbarism on the coldly logical scale such as I have just seen. If I don't stop our friend, he'll at least have a damn rough trip, that I can promise you."

Two hours later Randall had added twenty robots to his service and nine had already departed to set up specialist offices.

The ship's charts were sent for as a basis on which to draw up new ones. Two robots that had consulted the city memory banks were already

in deep consultation on explosives, skillfully arranging new timing devices.

Randall shook his head, suddenly struck by the grotesque aspects of the situation. A submarine crew and twenty-one beehives to fight a war. He must be mad!

Chapter Four

NEARLY FOUR DAYS later, several people were sharing his opinion.

"I suppose the Old Man knows what he's doing." Ordinary Seaman Heston picked a blade of golden grass and chewed it thoughtfully. After a few seconds, he spat it out of his mouth disgustedly. "Ugh! Bitter muck. They haven't even got proper grass." He returned to his original subject. "I mean, you can't call it training, can you? A lot of metal rods stuck in the ground and some guys with earphones on. If we were at sea, you'd call it A.S.D.I.C.; we'd be listening for another sub, underwater detection, like. What the hell does he expect us to hear underground—worms?"

His companion, Dusty Miller, earphones clamped over both ears, said, "Why don't you shut up? I can't hear half what you're saying."

Some twenty feet behind him, Lieutenant Cooper was saying, "Yes, sir, they signed on to a man. I suppose it was a gesture of collective protection but they signed, all of them."

Randall smiled faintly. "Any awkward questions?"

"One or two, sir, nothing earthshaking. Mostly about leave and pay. I did have one question from Burton about mail and I had to explain all over again that there would be no mail. I think he got it in the end but he was darkly suspicious at first. I gather he was expecting a postal order."

Randall nodded thoughtfully. "It takes a long time for the mind to adjust; caught myself thinking yesterday that I should check the roses when I got back."

"Do the same thing myself, sir. Only this morning before you called, I found myself thinking that old Jack—friend of mine, sir—would never believe one word of this." He sighed. "I expect Jack has been dust for a very long time now."

"Yes." Randall changed the subject. "You did very well, Number One. I left you a rotten job. By the way, have you got used to the robots yet?"

"Not really, sir, but I'm beginning to. I guess you can accept anything, after the robotic flyers."

Randall smiled, then turned. "Austin!"

"Sir?"

"I bet you're wondering why we're using these obsolete detection methods when we could pinpoint the enemy with absolute accuracy by modern techniques."

"Yes, sir, I am. On the other hand, I respect your logic. I conclude you have excellent reasons."

"Delete the word 'excellent'. I am assuming that the alien vessel has equipment capable of registering the high-frequency impact of detection instruments. If he ran into a concentration of such instruments, he might become suspicious and change course. At the moment, he is following certain geological formations through which he can pass most easily and is coming straight for us. But our obsolete instruments won't register; we're only listening."

The robot bobbed slightly in the air with a curious suggestion of respect but made no comment.

A hundred paces behind the two officers, Forsythe and a group of officials watched the preparations with puzzlement. They knew that beneath the ground was an alien war vessel and that above, on this level, golden plain, a group of their long forgotten warrior ancestors were going to try and stop it, but they had no idea how.

They saw little groups of sailors in their obsolete period blue uniforms squatting on the golden grass. There were four groups, separated by about a hundred and fifty meters, doing nothing but sitting. It was true, of course, that some of them held instruments and that one member of each group wore headphones—whatever they were.

In front of the sailors, at a distance of about a kilometer, were a large number of what looked like large, corrugated black metal barrels. These

were placed in rough arcs in groups of six, dotted haphazardly over a large area for no understandable reason.

On the open plain, Heston was still complaining bitterly. "They must think we're as crazy as the Old Man, sitting out here in the blazing sun, listening to the blasted ground. We could be in that nice little bay having a swim now, instead of—"

"Shut up," said Miller in a shocked voice. "I've got something. Good God, I've got a reading! There's something *down* there! Mick, call number two group; see if they can pick it up, bearing green five, four."

Ordinary Seaman Michael Herne picked up the obsolete field phone provided by the robot construction section that morning and made the call.

"They got it." His face was blank with disbelief. "Confirmed: green five, four."

Heston sat bolt upright. "You're mad, both of you! He looked at one of the instruments and his face paled. "I'd better call the Old Man. You try to get a fix on the thing."

Four minutes later, all of them had accepted it and were calling out readings with the precision of veterans.

"Enemy vessel, green five, two, speed five knots, depth six hundred feet."

Randall, trying to appear calm but inwardly keyed up to the limit, turned to the robot. "Well, Austin, you're the mathematician. Remember what I told you, time and number." He picked up the field phone. "C.P.O. Duggan, stand by to fire."

A hundred paces away, Duggan, lying full-length on the grass, said, "Standing by, sir." In front of him was a long panel with a series of numbered buttons.

There was a brief silence, then the robot said, "Now, sir—number six."

"Fire six!"

Duggan pressed the number six button. "Six away, sir." Far out on the golden plain, the soil and grass on which the black barrels rested seemed to blur and shimmer. One of the rough arcs of six barrels seemed to wobble uncertainly and then, slowly, like heavy stones in thick mud, they began to sink.

"Number four, sir."

"Fire four!"

"Four away, sir."

Another arc of six barrels began slowly to slide beneath the ground.

"Eight and nine, sir."

"Fire eight and nine!" He turned. "Call those sailors in, Number One, and don't waste any time."

"Number ten, sir."

"Fire ten!"

Randall stood still, watching the men sprint toward him. Inwardly he was counting: *Let's see now. At one inch per second, per second—where the hell had Austin got to?—forty, wasn't it? Yes, forty, must be more than that now—oh, hell!*

He became aware that Austin was at his side and counting steadily.

"Ninety-five, ninety-six..." He seemed to count for an eternity. "Two hundred and eight, two hundred and nine-zero!"

It seemed to Randall that the ground kicked savagely and with unnecessary brutality at the soles of his feet. Here and there men staggered and nearly fell.

There was no sound of an explosion but far out on the plain a wide fissure, as jagged and as swift as lightning, opened and closed with an abrupt crunching sound.

Almost immediately the ground jerked again and then again. More fissures and cracks opened and closed in the distance. The grass shivered

and danced and large sections of grass-covered soil sank several feet or rose at odd angles on humps of earth.

The jerking stopped but tortured grunting noises came from the ground. Far in the distance a geyser of dirt and black smoke suddenly jetted ninety feet into the sky and subsided as abruptly as it had come.

More sections of soil and grass rose and fell. Plumes of bluish smoke began to drift lazily from cracks and hollows and a pall of dust began to drift tiredly away with the light wind.

Randall shook himself mentally; somehow the upheaval had numbed him. It had been like watching the birth of a volcano.

"Austin, you can check with your advance instruments."

"Yes, sir."

Almost immediately Austin was joined by two other robots and within two minutes he called, "It's stopped!" Austin sounded as jubilant and as excited as a human being. "There's no response whatever from the power circuits, sir, and—yes—the forward part of the vessel is lying at right angles to the rear—sorry—stern. She's broken in half, sir!"

Heston, who was standing near, threw his hat in the air. "We got the bastard," he said. "What was it, anyway—some sort of underground submarine?"

Randall smiled faintly. "I think, Number One, that the men should see the picture I saw. It'll do them no harm to know the type of enemy we're up against."

Relf hurried over. Relief and a slightly guilty feeling made him shakily enthusiastic. "Magnificent, wonderful. The entire human race owes you an everlasting debt."

"We've knocked out one ship," said Randall, dryly. "No major victory."

"But it's wonderful, wonderful; you saved a city and at least three million innocent lives. If there is anything we can do..."

"There is. Right now, you can start adapting your culture to the

exigencies of war. You will make no public announcement of this success; instead you'll instruct your news services merely to say that you lost contact with the approaching enemy vessel but, as a safety precaution, the evacuation of Markstown is proceeding with all possible speed."

"But why? The boost to public morale will be beyond price."

"True, but you will also hand the enemy all he needs to know. He's in the dark at the moment, and I have every hope that he'll send another vessel to find out what happened to the first. Since the robots are now sowing extensive subterranean minefields along your entire northern coastline, such an attempt should prove interesting."

Relf looked at him with considerable respect. "I will send orders immediately." He frowned thoughtfully. "What exactly did you *do*?"

"Well, with the aid of the robots I simply took advantage of your mining device, also used by the enemy, to alter the atomic structure of the soil and sink certain devices to his depth."

"What an ingenious idea! You must have a highly imaginative mind."

"Imaginative!" Randall laughed. "Good God, no, not my idea at all; I've had the same treatment too often. I simply depth-charged him!"

Relf looked at him blankly and walked away to send orders to the news services. What the hell was depth-charging?

He gave the necessary instructions and, at the same time, contacted the memory banks, through the communication unit.

He walked back slowly, his face frowning and thoughtful. So that was depth-charging: a pattern of explosive charges, dropped in such a way as to box the hostile vessel completely.

He could visualize the gigantic pressures built up when the explosives were close enough and detonated together. He could almost feel the terrifying impact, hear the rending of armor plate and the hiss of escaping air.

Barbarians, savages, dog eat dog. Yes, they'd resuscitated killers whose conceptions of violence were as savage and as primitive as the aliens. He

felt, however, a remote and guilty satisfaction: the aliens thought they could resort to mass murder without penalty; now they were paying for their barbarism. On the other hand, did you prove to an enemy that might was not right by using it more skillfully?

He sighed to himself. Over how many thousands of years had philosophers and thinkers debated that question and arrived at no satisfactory answer?

When he approached Randall, however, his face gave no clue to his thoughts. "I think you will agree with me, Captain, that after this wonderful effort and your sudden transit from one age to another, you and your men need some sort of relaxation. As I believe I mentioned, we have a large number of young women who have volunteered to provide escort of the members of your crew." Randall looked at him without friendliness. "I do not know what moral codes apply to this age and, in view of this, as far as my men are concerned, I must observe the codes which apply to mine. I cannot have my ship nor, for that matter, the surrounding countryside, turned into a kind of disorderly conduct district. It would be bad for morale and even worse for discipline. Secondly, although no doubt you mean well, I object to the implication that my men are wild beasts who must be placated and made docile in terms of flesh. No, my men will go on leave, if I can spare them—we must start trials as soon as possible—in an orderly and proper manner. If you can arrange a rest center in one of your cities—if you can stomach the thought—that would be ideal. Tours could be arranged, short instructional courses, entertainment and so on."

He paused and smiled faintly. "What they do with their spare time is another matter. I am their Captain, not a minister of religion."

Relf was obviously taken aback. Barbarian? The moral issues escaped him but he saw the need for discipline and could appreciate the other's point of view. The remark about wild beasts not only made him feel guilty—it was true—but disturbed him by its penetration. Randall might be a barbarian but he was no man's fool.

Relf said, to cover his confusion, "I don't know quite what you mean by your ship. Isn't your vessel still moored in the bay?"

Randall laughed, perhaps with unnecessary loudness, feeling he'd been too harsh with the man. "Any naval establishment, even if it's ten miles inland, is still a ship; one still goes 'ashore' from it. It's a tradition in the

Service."

"I see." Then, quickly: "I accept your recommendations without reserve. A rest center will be provided in one of our cities."

"Thank you. But certain rules must apply: no women or liquor on the premises. As I say, what the men do outside is their concern. Inside, however, these rules must be observed for the benefit of those who *do* wish to relax in peace."

"I see your point clearly. Anything else?"

"Yes. I want a simple instructional course on robots set up. It must be brief and without technicalities. I'll select a few men to take it and they'll in turn instruct the others. It will go better that way."

He paused and smiled at Relf's slightly bewildered expression. "I lost four men. A submarine does not carry excess baggage; therefore those four men were necessary to the efficient running of the ship. I must replace them with robots. The blending of part-robot, part-human ship's company into an efficient instrument is going to be a delicate business."

"I quite appreciate that; I will attend to it immediately." Relf hesitated. "There is just one thing. As your men will be visiting the city, they must be told that only a limited number of our people speak English—your period English, that is. Those of us who do speak it, learned it for your benefit. "

"Thank you for the information. I, in turn, must warn you. Some of my men, when they have had too much to drink, are inclined to truculence and become involved in fistfights. I trust you have some form of restraint."

Relf thought, *I was right: roistering pirates, loose in civilized community*, but he said, "The city wardens—police—will be warned of the situation and provided with restraints. These are not weapons but surgical instruments for anesthesia; they numb the body, inhibit its movements but cause no pain. Such men will be regarded as medical cases and treated accordingly."

The first one to be treated, thought Randall sourly, would be Heston. Did these people have jails? If not, they'd better start building one.

Two hours later Randall was back in "barracks" near the ship. He made

the gesture with his hand which, the house-bot assured him, would effect connection between himself and Intelligence. There were so many damn gestures, he thought irritably, it would have been a damn sight easier to dial a number.

The four robot projections appeared almost instantly, however.

They said "Sir?" in unison. "Any messages, yet?"

One of them inscribed with the words *O/S (J) Ford, R.* moved forward slightly. "Several of significance, sir. The first, addressed to the 27th Command, reads: 'All contact with Mluck ceased at 9.13 K.I.'—eleven hundred hours. 'No response to long-range contact or reactor beams: all systems out of commission. Vessel accordingly presumed lost from causes unknown.'"

"Was the message coded?"

"No, sir. There was a reply, also uncoded, which reads 'Their Lordships are gravely disturbed by the loss of Mluck (9/1) Pre-sailing tests, service checks and maintenance reports are to be forwarded to this department immediately. The robot made a sound which was very close to a laugh. "Half an hour later there was another message from the same source which reads: 'Checks in order. Advise monitoring of human communication and news services.' To which our invaders replied: 'Human communication systems already checked. The Species news system reports loss of contact but offer no explanation. Evacuation of their threatened cities continues as before. Propose, subject to your approval, send Mluck (8/3) to investigate. Geological surveys of the area provide no evidence of volcanic action or like hazards.'"

The robot made the laughing sound again. "There was an almost immediate reply to that one, sir. 'Their Lordships, although perceiving the logic of your proposal, cannot endorse a course of action with such an unpredictable hazard risk. They would, however, be prepared to endorse paragraph 33 of the Military Manual, thereby transferring responsibility for a given action to the area commander. Kindly confirm or suggest alternative measures immediately.'"

Randall, conscious that he was grinning hugely like a schoolboy, said, "Let us hope, my friends, that he confirms. By the time he arrives, he won't be able to get a cigar through those minefields. Besides, each one is

special: they have enough power to blow him clean up to the surface."

He took out his pipe and found the bowl full; somehow he never seemed to get around to lighting it lately. "Did you get those pictures?"

"Acting on your instructions, our special units, using non-radar conventional cameras, managed a moderately accurate survey of the peninsula and all the enemy installations. As you will see, sir, the enemy has confined most of his construction to the peninsula. There are some peculiar buildings at the northern tip of the prominence for which we can determine no purpose."

Large, colored, three-dimensional pictures appeared. Randall saw tall blue cliffs. Apparently fixed to the cliffs were two enormous towers, reaching down into the green sea and climbing nearly five hundred feet into the air. The towers were black, squarely shaped and about eighty feet thick.

"We have determined," said Robot Ford, "that about six feet below the surface of the ocean these towers reach into vast transparent tanks, the contents of which we have been unable to discover. These tanks are about thirty feet thick and extend outward into the ocean for about three hundred yards."

Randall lighted his pipe. "They look vulnerable."

"We regret to report that this is only an appearance, sir. All installations are protected by an invisible but completely impenetrable force-bubble. Any object entering would immediately disintegrate with considerable violence. In the case of the shore installations, the force-bubble extends to water level."

"Any other pictures?"

"We have a tolerable long-range photograph of what we assume is their main base, sir. This, also, is built on the coastline."

Randall found himself looking at—was it a city? It covered an area of several square miles. It looked like a cross between a crazy scaffolding and a power plant. Huge, ponderous black buildings, like upended ship's boilers, stood next to slim, crazy-angled lattice towers. There was a thing which appeared to consist of twining pipes, at least six feet thick, which

ran for about a mile between the buildings, then buried itself in the ground. There were no roads or visible pathways, but the soil sprouted things which looked like elongated letter boxes. Here and there figures were visible but whether they were the aliens or part of the installations he was unable to determine.

"What is the substance of these buildings, or don't you know?"

"We suspect an atomically produced plastic, sir. Light, easily produced and economical. Logic leads us to believe it is hard enough for practical purposes but is not armor—armor would be unnecessary behind a force-bubble. Like steel tents for an armored column, if you understand me, sir."

"I understand you perfectly, thank you." Randall broke contact and walked over to study the newly delivered charts.

It took him some time to find the one he wanted but when he did the information cheered him considerably. The oceans around the peninsula were comfortingly deep and without rocks or other hazards. Better get things moving now.

The next few days were intense. He made a thorough inspection of the ship, conducted moored-tests and conferred with experts.

Elsewhere men came and went on short specialist courses and in the midst of his activities Randall managed to find a few brief minutes to listen to one of his men explain the course to others.

He was both shaken and delighted. Leading Seaman Homer had not only absorbed the course completely but had an inborn genius for simplification and instruction.

"Now this here is a model of a robot, see? It ain't got legs because robots use anti-gravity. That's like the cushion of air a hovercraft uses only more advanced—put that damn butt out, Tomlin. You're here to listen and learn, not lounge around.

"A robot has no eyes but it sees as well as you and me, by radar. In the base here are short metal arms it extends when it needs to. Now get this: robots can not only talk but they can *think*, and most of them are pretty clever thinkers at that, so don't try to be smart. Some of them'll be on the

ship, working with us as shipmates, and let me tell you, they've got real feelings. If any one of you tries to get funny with them, you're in for it, see? That's official: the Old Man'll have your guts for garters, see?"

Chapter Five

THE FAREWELL committee stood on the pier and watched the preparations with mixed feelings. Relf and Forsythe were even more confused; they had been conducted over the vessel and seen the primitive but frightening ingenuity of its construction.

It's a pirate vessel, thought Forsythe. Stealthy, deceitful and quite without mercy, yet they needed it, needed the men who controlled it. "Cast off!"

Ropes and cables splashed into the water and sure-footed blue-jacketed ruffians—sailors—ran about the sloping vessel.

In the conning tower, Randall said, "Slow ahead together."

There was something comforting in the answering voice.

"Slow ahead it is, sir."

A small wake built up at the stern, a bow wave formed, and they began to move forward.

Behind them, over the land, the alien sunrise was bringing its first curious whiteness so that even the green sea looked milky. In the whiteness, the submarine was a black and ominous pointer, a weapon pointed at what? The watchers shivered and, as if by mutual consent, turned and walked down the pier toward the land.

In the conning tower, Randall reached down and detached the microphone from its clip. "Now hear this—now hear this. Captain speaking." He paused long enough for everyone to be listening. "You all know, and have seen, the kind of enemy we are up against. Perhaps many of you have told yourselves that this isn't our age and it's none of our business. Unfortunately, it *is* our age and it is our business because the enemy won't discriminate. He will not say to himself, These people are from another age and do not belong here, therefore, we will spare them.' When the rest of the people of this age go down, we shall go down with

them—unless we are prepared to do something about it. We are going to try to do that now. This is not an exercise; we are going to have a crack at the enemy.

"You may ask yourselves why we should fight this war alone. But we are not alone. As most of you must know by now, we have taken on four replacements: Ordinary Seaman Austin, Ordinary Seaman Fiat, Ordinary Seaman Bentley and Ordinary Seaman Nash. As you are also aware, these are robots, but you know now that they react and feel almost the same as we do.

"These robots have joined the ship under exactly the circumstances as you once joined. They enjoy no special privileges and are subject to and must abide by exactly the same regulations and orders which govern us all. Furthermore, and remember this, in action they share the same dangers and the same risks as everyone of us. As your captain, I expect the same cooperation and lack of friction which we have always found together. Thank you. That is all."

He replaced the mike thankfully and took out his pipe to have a smoke before they started sea trials. They had to do those on the way and hope... there was no time for anything else. Time, that was a funny thing. The last time he had taken the Old Girl to sea had been—how long? He had not made direct inquiries but he suspected well over a thousand years. A people didn't expand to the stars in just a century or so.

The vessel left the shelter of the bay and began to roll slightly in the long, smooth swell of the green ocean.

"Half ahead together." It was good to be at sea again, even an impossible green one like this. It was a salt sea, wasn't it? It had the same spray, the same tang, the same iodine sort of smell close to shore.

Cooper joined him in the conning tower. "What made you name all those robots after cars, sir?"

"Can't say really, Number One; maybe because they're basically machines. I choose the simple names for obvious reasons. Ordinary Seaman Rolls Royce, Cadillac or Mercedes would have sounded rather flamboyant, don't you think? "

"Good idea anyway, sir. By the way, you'll be glad to hear that

everything seems in order below. We had a little trouble with a couple of valves but Holmes freed them in time. They're working perfectly now."

"I'm glad to hear that. Sorry to rush you straight away, Number One, but we have to make a start. I want all guns checked, so get the men up here for drill. While that's going on, set up the torpedo tubes for a dummy run. Bentley knows what to do theoretically, but hasn't done it yet."

"You're going to make a robot our torps man, sir?" Cooper sounded faintly shocked.

"We've got a robot S.B.A., a robot radio operator and a robot cook; let's find out before we pass judgment."

Cooper said, "Yes, sir," dubiously and went below.

A few seconds later, men were spilling onto the deck and uncovering the guns.

Randall looked at them. Once he had thought the ship's armaments formidable but now... bows and arrows? It was true, of course, that with the robots' assistance the munitions of some of the smaller arms had been gimmicked, but even so an attack might be little more than a gesture. On the other hand, the very age of the weapons might constitute a surprise just as Greek fire might have stopped a tank. The aliens were no doubt prepared for the most highly advanced weapons it was possible to conceive, and singularly ill-equipped for archaic missiles such as Randall had. In any case, the old weapons made an abominable and demoralizing amount of noise, which might be a new thing in this age.

"Torpedo crew standing by, sir."

"Stand by to fire." He paused. "Fire one." He waited, then swore softly under his breath. "Chief, send Bentley up here immediately."

The robot arrived within a few seconds. "Sir?"

Randall looked it up and down. At that moment he was the captain of a submarine and had almost forgotten that this sailor was a constructed entity.

"Bentley, did you hear my order just now?"

"Yes, sir."

"For your benefit and mine, kindly repeat it."

"Fire one, sir."

"Good. I should hate a miscarriage of justice. Therefore, kindly explain why, on my order to fire one, you discharged all tubes."

"It was an error, sir. I selected the right button but unfortunately used an electrical impulse to depress it."

"It did not occur to you that all tubes were on the same circuit?"

"No sir."

"In the future, when I order you to fire a selected tube, you will use one of the mechanical extensions with which you are provided. Is that clear?"

"Yes, sir."

"Furthermore, Bentley, are you aware of the implications of the titanic blunder you so blithely describe as an error? In action a mistake of this magnitude could well betray our position and lead to the destruction of the ship, or else sink a large number of friendly vessels we are supposed to be guarding. Do I make my point?"

"Yes, sir, very clearly. I'm sorry, sir."

"Very well. You may return to your post and try again."

When Bentley got back, his human companions, who up to then had only referred to him indirectly, looked at him with something akin to understanding and certainly with sympathy.

"Don't take it too hard, Bot; you've got to learn. The Old Man blows his top now and then but he doesn't really mean it."

Bentley had been accepted.

In the conning tower Randall said, "Fire one—ah, that's better, Bentley. Fire two—good, good. We'll try that again, shall we?"

Part of his mind was still with the ship, however. Had the compasses been correctly aligned with the new magnetic poles of this planet? They had new star charts, but could he navigate by these alien stars? Certainly the sea charts seemed to be comprehensive, all obstructions, depths, texture of the ocean bed clearly marked. They had even gone so far as to indicate prevailing currents. It had all been done by radar and things like that, but even so he wished he'd had something just one fifth as helpful way back in forty-three.

"Full ahead together!"

He watched the bow rise higher as the ship surged forward. By God, how proud he'd been when he'd first given that order. A new ship, just back from trials and she'd hit nearly thirty-six knots. Thirty-six knots. What was that in this age—the pedestrian slowness of the very old?

They had added gimmicks in the last week, of course: a couple of robots had fixed two circular bronze-colored plates astern, just above the screws. These, they had explained, were propulsion plates which thrust the water away, thus pushing the vessel forward. They had then gone inside and fooled around there.

"It is necessary to afix an adjuster. This works in conjunction with the propulsion unit, hardening the atomic structure of the surface plates to meet the water pressure due to increased speed."

It had sounded crazy but the device was no bigger than a match box so he permitted them to install it inside, out of sight, without argument.

Then there was the chemical motor—no bigger than a brick—which, they had assured him, was absolutely undetectable. "With respect, sir, it is a toy but one with certain advantages. It has no electrical or explosive basis and therefore will not register on normal instruments. Of course, sir, your top speed will be about a *klan*—sorry—six knots with it, but it might prove useful in special circumstances."

Randall would have agreed with enthusiasm had he been able to convince himself that a thing the size of a brick could push a hundred and eighty feet of submarine through the water at a speed of six knots, completely undetectable. He had said, however, without enthusiasm, "I must try it all out."

The thought awakened him to reality; better go through the motions.
"Austin."

"Sir?"

"Stand by to boost."

"Yes, sir."

"Stop engines."

"Stop engines, sir."

"Cut in boost."

"Boost in, sir."

The vessel lost way slightly then picked it up with increased speed.

"Clear decks, close hatches!" He waited, then he said in what he felt was a too casual voice, "Notch one!"

There was a distinct lurch which caused him to grip the handrail of the conning tower and then thrust like he had only experienced in a powerful sports car.

The bow waves broke, became twin curtains of foam and white spray and the wind blew fiercely in his face. What damned impossible speed had they suddenly jumped into?

Obligingly, a voice began chanting, but with a certain querulous disbelief. "Forty-nine knots—fifty—fifty-one—

Good God, it's going around like a second hand! Sorry, sir—sixty-one—sixty-two—it'll rip the blasted plates off—seventy!"

At seventy-five, Austin's voice said, "Maximum notch one. Switch to notch two, sir?"

"Hell, no. I'm getting my head blown off up here and the spray is hitting me like machine gun bullets. Notch back."

"Yes, sir. You will try the chemical engine and notch two later, sir?"

Randall, relieved by the decreasing speed, replied, "Well try notch two when we're all too damn scared by something else to worry about trivialities. At the moment, I've had enough. How does that thing work submerged?"

"At normal operational depths, sir, about the same speed."

Randall said, "I see. Out-notch, start engines." He didn't see, not really. A submarine not only running rings around a destroyer but showing a white wake to a motor torpedo boat!

Five days later Randall put down his binoculars and turned up his collar. It was cold here near the extremities of the northern continent and the green translucent rollers had a sheen like ice.

"There it is," he said.

Cooper lifted his own binoculars and swept the horizon. "That black speck at about red three five?"

"You've got it. That should be Mount Sven; it dominates the peninsula." He leaned forward. "Stand by to dive!" He shivered. "Be glad to get below: it's damn cold up here. Come on."

Ten minutes later, the *Euphrates* was cautiously approaching the alien coast at periscope depth.

"How far to the force barrier, Austin?"

"Six miles, two hundred and twenty feet, sir."

"How deep?"

"It is one hundred and fifteen feet thick, sir."

"Let me know when we're within half a mile of it." Randall grinned twistedly at Cooper. "I'm banking on the hope that the alien is so confident the human race can't fight, he's relying on the screen." He opened one of the charts. "This is interesting. I made a note of this yesterday, thanks to this river here, and this rocky island here. Well, see for yourself."

Cooper looked at the chart and frowned. "A permanent three knot

current."

Randall nodded quickly. "It's interesting to note that it fades out here—right opposite this so-called alien city.

"Fifty feet beyond screen, sir." The robot was almost whispering.

"Thank you. Up periscope. Action Stations! Load all torpedo tubes! Stand by to fire!"

He bent, pressing his face to the foam rubber mountings of the eye pieces and rose with the periscope.

Darkness, slowly changing to green, the white foam of a rolling wave on the choppy green sea.

He turned the instrument and the blue cliffs seemed to loom almost above him. The clear air was deceptive he knew, and he estimated the distance at about half a mile.

Climbing the cliffs, about three hundred yards apart, were the enemy installations. They looked bigger than they appeared in the photograph and awed him by their size.

They rose from the water like huge black factory chimneys and towered, impossibly vast, five hundred feet above the top of the blue cliffs.

"Steer green five."

"Green five it is, sir."

"Stand by to fire... Fire One!" He waited. "Fire two!"

There was a *thunk* and the comforting rumble of a departing torpedo. Then another.

"Steer red seven. Full ahead together!"

A tight turn and, with luck, he could let go with the stern tubes at the second installation before the first two torpedoes had hit the first.

"Hold it on red five—steady. Fire three! Fire four." He was sweating. "Dive, dive, *dive!*"

The vessel began to tilt but as it did so, the plates shivered slightly and there came the familiar rumble of an underwater explosion and, almost immediately afterward, another.

He kept his eyes fixed on his watch. "Level off." They should now be down to a hundred and twenty feet yet still have another forty beneath them.

"Stop engines!"

The rumble of an explosion—another.

He opened a small box of blank-faced instruments. "Out lights, shut down all electrical circuits. All robots into shielded cabinet. No talking."

He stood there in the sudden suffocating darkness staring at a box of dials he couldn't see. Had he thought of everything? No undue electrical disturbance, the robots shielded, no engine or screw vibration, nothing but a long object drifting with the current. Would the enemy investigate or put two and two together? He'd soon find out.

It was not soon; the alien reaction was nerve-rackingly slow. Half an hour passed on the luminous face of his watch before one of the blank-faced dials turned a sullen red. Somehow the redness lighted printed words: SEARCH PROBE FOR THE DETECTION OF HYPER-REACTION MOTOR.

Well, you won't find that here, Randall thought. The realization gave him no particular comfort but he was glad of the dials Austin had insisted on bringing. They told him what was going on above without betraying his position. The red glow faded and vanished.

It was eleven minutes before another of the dials lighted up. SEARCH BEAM FOR THRUST-DRIVE DISTORTION.

Keep searching; ours is shut down, he told it mentally and with a little more confidence.

In a period of two hours, all the dials glowed for brief periods but no one remained alight for more than thirty seconds.

He realized, with a brief feeling of relief, that these were routine

search-sweeps. Had there been a reaction, the beam, or whatever it was, would have stayed locked on them and brought down God knows what on their heads.

He let the ship stay dead for two hours... Tense hours in which it seemed to get hotter and normal breathing sounded like a gale of wind. Somewhere, not far away, a man was struggling desperately to stifle a cough.

He could feel, rather than see, Cooper standing at his side. He said, in a whisper, "Start reaction motor; pass it on." Now they'd see if a thing like a brick could drive them at six knots through the water.

"Men on manual pumps, blow tanks. Pass it on."

He thought, *I bet those men are calling me something, using hand pumps in the suffocating darkness.* He was shocked to hear the screws start turning—it worked!

There was some whispered cursing in the darkness and then he could hear the curious sloshing sound of the pumps.

He waited with ill-restrained impatience and then began to turn the hand control of the periscope.

When the instrument cleared the surface, he was pleased to see that shadows were gathering on the horizon; it was close to darkness.

He made a complete sweep with the periscope and saw that the current had carried them at least six miles from the point of attack.

Three to four miles ahead, the black outline of the alien city stretched backward from the sea. Here the cliffs gave way to long gray beaches. The aliens had built their city almost to the water's edge.

He was shocked by its size for again the long-range photographs, although clear in detail, had given no clue as to its immensity. Some of the black, upended boiler-shaped buildings were at least a thousand feet in height and were linked by sagging cables—or was it suspension bridges? Somehow the general impression of the city was menacing and the bulbous buildings reminded him of huge bloated animals ready to lurch forward and attack at a given signal.

He ordered, in a low voice, "Steer green ten."

The response was inaudible but he took it to be an affirmative.

He made another half sweep and stopped, becoming aware of something he had noticed but failed to remark on before. On the green choppy sea were slowly drifting patches of—no it wasn't weed. It looked more like froth, but thicker, brown froth. Yes, he had it now: *frog spawn!*

Where the hell had it come from? There had been none of it when he had attacked. Something dislodged from the seabed by the explosions, perhaps? Hell of a lot, wasn't there? Some of the patches must be a hundred feet across.

He became aware of some close at hand and swiveled the periscope quickly to catch it.

He was lucky. He caught the nearest patch on the crest of a wave with the light behind it. Jelly, exactly like frog spawn, only the jelly-like transparent eggs were almost as big as a normal hen's egg. .

In the center of each transparent egg or jelly sack was a tiny black humanoid figure, like a tadpole, but with legs and arms. It wasn't human, of course; probably was a sort of sea tadpole peculiar to this planet. Yes, that was it; no doubt about it, none whatever.

At the back of his mind, however, there *was* doubt and he had the uncomfortable feeling that he was trying to convince himself.

He swiveled the periscope irritably, estimating his probable speed with the skill of long experience. Six knots! A thing called a chemical motor was driving the vessel through the water undetectably at a steady six knots.

An hour later, darkness had descended completely but with its coming, light had come to the alien city. Not the light of street lamps familiar in his age but a radiance which appeared to have no source and was a peculiar and unpleasant mauve... a mauve which clung to the city like a mist, which lined the wave tops and left frightening black gulfs between them.

"Steer green two." He made rapid mental calculations, recalled accurately both the depth of the ocean and the angle of the descending

seabed.

Two minutes! "Close up all sections! Gunners forward." He took another quick look through the periscope. "Blow tanks."

Again muttered cursing and the sound of hand pumps.

"Load decoys." His own idea, that, but the robots had cooperated with enthusiasm, incorporating tiny transmitting devices to broadcast frequencies the aliens would undoubtedly search for.

He turned to Cooper. "I'm going aloft as soon as we break surface. Send the men after me singly and impress on each one the need for silence. Right, here we go."

Chapter Six

THERE WAS a cold wind blowing aloft and, broadside on, the *Euphrates* rolled heavily in the long swell but the men reached their weapons quietly and without incident.

Randall, shrunk into his collar against the cold, saw the quick-firing weapons swivel and point at the alien city. Absently, as if noting it for future reference, he saw a wave break against the ship. Saw the black, foam-flecked water rise up the side, engulf the men to their hips and then cascade in mauve down the opposite side.

He waited until the vessel steadied, then he said, "Fire!" The ship lurched, and the fore and aft quadruple machine guns chattered redly and savagely. Almost beside him, the Oerlikons began their ear-numbing riveting with bright yellow flashes, and the forward gun let go with a shell. The sea caught the flash, reflected it, lighted the ship briefly and died, leaving only the flickering embers of the smaller guns.

Randall watched the tracer arc redly upward then curve down toward city like a curtain of crimson stars.

"Cease fire! Clear decks! Stand by to dive!" As he spoke the brief burst of fire struck the target and its effect numbed him. He knew the small arms ammunition had been gimmicked, but good God!

The machine gun bullets had been given the explosion power of

grenades and four facing buildings virtually disappeared in a mass of reverberating explosions. With eight machine guns pumping bullets at the rate of ten a second, he supposed it was not surprising.

As for the Oerlikons, their small caliber missiles were ploughing a line of explosions across the city like six inch shells. He couldn't have done more damage with four heavy cruisers!

As the smoke was carried away by the stiff wind, a five hundred foot building swayed and collapsed in a pile of ruin and dust. As the robots had predicted, the buildings were strong enough for normal purposes but just weren't designed for that kind of treatment.

As the last man vanished below deck, there was a single gigantic flash, perhaps a quarter of a mile inside the city. As the flash vanished a lance of flame jetted suddenly into the sky. There came a rumbling explosion and a mushroom of fire rose a thousand feet into the sky, then billowed outward. Within seconds a huge section of the city was entirely engulfed in bright smokeless flame and, within it, buildings began to sag and collapse.

Randall could feel no pity. He had seen women and children burning to death in the same smokeless flame without hope or mercy. No doubt a storage tank of the stuff had been hit. Served the bastards right.

He flung himself down the hatch and slammed it shut behind him. "Full ahead together. Dive, dive, dive!" He gripped a stanchion as the vessel tilted. He knew what they had to do or, more aptly, what *he* was going to do, although up to a minute ago he had been tortured by doubt.

"Steer green twelve."

"Green twelve it is, sir."

"Level off." He had been keeping a wary eye on his depth and speed. His problem had been whether to hide or run: would it be better to bury himself for hours near the enemy's doorstep or run like a scalded cat before he woke up?

As he'd watched the fire engulf the city, the solution had come to him... he had to run. The aliens' reaction had been slow before—thirty minutes. This time, although perhaps not prepared to be hit again so soon, they would be more alert—say fifteen minutes. To this fifteen minutes, he could

add another ten, Randall hoped, for disorganization, priority demands and the equivalent of choked switchboards and the possible death or delay of key personnel. Yes, he was going to run like a scalded cat, plus.

"Stand by to notch."

"Standing by, sir."

"Stop engines." He waited until the vessel lost considerable way, then he said, "Release decoys!"

As the two gimmicked torpedoes left the vessel two spots of green appeared on one of the advanced instruments in the box. The torpedoes would run at a steady eighteen knots, six feet below surface, almost indefinitely.

He did not expect them to run indefinitely, he expected them to be detected and destroyed. When they were destroyed, the green spots would blink out.

"Notch one!" The vessel lurched; fortunately he was grasping a stanchion but somewhere there was a thud and a lot of cursing.

A man began chanting, clearly determined to remain casual. At sixty-five knots his resolution broke and his voice became hoarse with incredulity and excitement.

"Seventy-one—seventy-two."

At seventy-five, Randall said, "Notch two!"

The ship lurched again but the voice was lost at seventy-seven. It was swept away in a roar of sound which Randall realized must be due to water piling up at the bows, then thundering past the vessel's flanks, a sort of underwater sound barrier. There had to be limits to this thing unless the atomic strengthening device also incorporated some other principle. Even if it did, the noise was numbing and the vibration terrifying. It felt, he thought, like driving a fast car over a bumpy road with flat tires.

At this speed, even two hundred feet down, they must be leaving a frothy bubbling wake on the surface which, in daylight, would be visible for miles. Thank God for darkness although, no doubt, in this age,

darkness provided no real cover.

Even as the thought occurred to him, one of the two green spots in front of him snapped out. They'd got a decoy!

"Out notch." As the speed dropped abruptly, his stomach twisted painfully. "Shut down electrical circuits, out lights, robots in shielded cabinet." He drew a deep breath, trying to overcome the queasiness he felt. "No talking."

He found that he was soaking with perspiration but his mind was concerned with other matters. Although his burst of speed had placed twenty or thirty miles between himself and the enemy, he was still too damn close for comfort.

"Steer green seven—on chemical motor!" It seemed like the only solution—to keep going undetectably, and creep away at maximum depth at a steady six knots.

One green spot was still visible, thank goodness. While they had something to find they might miss him.

It was nearly three hours before the green spot flickered and disappeared. All that time? What the hell was the matter with them?

Ten minutes later one of the special instruments lighted briefly and went out; five minutes later another. In the course of an hour, the rest glowed in turn and then everything went dead again for two hours more.

When the instruments did light again, the response was barely visible. They must be limited in effectiveness, short range only.

Five hours later, he was confident enough to restore the ship to normal.

When, after a further hour, there was still no response, he said, "Full ahead together."

Five days later, in the late afternoon, they were nosing on the surface, into the now familiar bay.

Through his binoculars Randall could see a large deputation waiting on the pier but before he was close enough to distinguish features a single

robot came racing above the smooth sea to greet him.

Randall read the white lettering on the hive-shaped body and asked, "Well, Ford, good news?"

"Excellent, sir." The voice was so enthusiastic that a smile was implied.

"Let's hear it, in order, and summarize, please."

"Yes, sir. Well, in order, three days after your departure there was a heavy explosion. Subsequent checks confirmed the destruction of a second Mluck ship. It ran afoul of the minefield, sir.

"Continual monitoring of the enemy communication systems were entertaining, sir. The enemy area commander was publicly deleted within an hour and his successor barely installed before you made your highly successful and paralyzing blow at the installations."

"Paralyzing?"

"Yes, sir. I must explain that. By a careful check on enemy communications and working in close conjunction with the master computers of the Department of Biology we think we have arrived at the basis of the aliens' war motivation, sir. Would you care to hear about it?"

"Yes, I would, but briefly please, I'm very tired."

"The enemy is a bisexual humanoid, sir, and the species has found no method of controlling reproduction. Consequently their early history was ravaged by wars for living space. When, however, they expanded to the stars, they thought the problem was solved. They considered it their divine right to seed every habitable planet with their own kind. This went on until a race called the Revain took exception to the aliens' methods and a war began. This war has now been raging for several centuries and our friends have taken, despite continual advances, some really horrible beatings in their many theaters of war. Unfortunately, the aliens regard these colossal losses with contempt; their grotesque manpower situation is such that these losses only ease the pressure behind them. So immense is this pressure that vast areas of their territory, conquered and otherwise, are covered with 'freeze vats.'

"The aliens spawn like an Earth frog, you see, sir, and, so intensely

overpopulated are his worlds already that he must, from necessity, keep this spawn in deep freeze until he can find room to mature it."

"Don't tell me." Randall leaned forward, gripping the rail. "They brought a couple of these vats here, built beds in which they could mature, and I torpedoed them." He was seeing again the jelly-like eggs on the water containing the tiny black human-like figures.

"You are very quick, sir. Yes, you set back the seeded occupation of this planet by five years."

"It makes me feel sick."

"Although applauding your reactions, sir, the enemy does not share your disquiet. Although heads are rolling in the military sphere, there is jubilation in what they term the Department of Colonial Expansion. The dispatch of two more vats makes more space at home, presumably for more vats. The aliens appear to be lacking in certain emotions, sir, and life is less than cheap."

"And our other attack?"

The robot made a curious dancing movement in the air. "Highly successful, sir. Nearly one-half of the city was destroyed or severely damaged. No casualty figures were given but they must have been heavy. More interesting still are the interdepartment exchanges in the enemy camp since your attack. The military are accusing the Department of Psychology of gross negligence in respect of the human race. Their supposed inability to fight was brought under heavy fire.

"Psychology, however, is sticking to its guns and claim that a Revain commando got here secretly. They concede, however, that should the human race take up arms, the results might prove catastrophic. Apparently, by methods unknown, they have managed to avail themselves of some of the past history of the human race. They didn't care for what they dug up, sir; their communications imply it might be appropriate to leave well enough alone, should humanity find a means of countering the suppression of their aggressive tendencies."

Randall looked at the crowd on the pier and sighed. Those fancy-dress boys—if only they could. They were big, strong, healthy men who, he knew, were by no means lacking in courage but were otherwise as helpless as

babes.

"Anything else, Ford?"

"One other thing, sir. A message in code, a very advanced code. It took us five hours to break it down and it was not from enemy sources. It reads: 'Continued reports of resistance by human race. Investigate immediately! There was no address, no signing authority, sir, but we suspect it came from Revain sources.'"

"Thank you, Ford. With no previous experience you have done an exceptional job."

Thank you, sir, but we have delved into the past quite a lot. We still have much to learn. "

"We all have, Ford." He sighed. "Although, at the moment, I could do with three days' sleep—have facilities been arranged for the men's leave yet?"

Yes, sir. Furthermore, transport is ready when you require it."

"Good, I'm giving the men five days' leave; they deserve it"

Ordinary Seaman Heston was a little bored. He had been on the conducted tours, he had oh'd and ah'd at the majesty of a city twice as big and many times as architecturally beautiful as any he had ever seen. He had bought curious and astounding devices in shops—there was no one to send them to, was there?—and he had been waited on, hand and foot, by robots. Somehow, however, it had begun to pall. There were no bars, none of those sleazy sorts of places where one could run into trouble at any moment.

There was beer certainly, but one drank it politely, like tea. Who the hell wanted to drink alone?

Someone had said there were women and, of course, he had seen plenty, some of them real dishes, but not his kind. Not the jaunty, brassy, eye-flashing, half-dressed, sexy land he fancied. These women were ladies, the marrying kind; they didn't wear much but you could tell.

He walked dismally and slowly through a public park which should

have stunned him with its beauty, and he didn't see it.

He'd be happier when he was back on the ship with the guys, he thought, maybe he could pick a fight with Miller. Not that he had anything against Miller, it was just that Miller was fairly tough, about his own size, and would probably appreciate a good fight just as much as himself. This was one hell of a place.

"Hello," said a soft voice.

He turned. She was standing by a tree, tiny, full-lipped, dark-haired and brown-skinned.

"Hello." He was gruff and uncertain.

"You are one of the sailors," she said. Then, indifferently, "I am here for your pleasure."

He said, "What?" and "Eh?" because he was nonplussed and because she didn't look that way. Perhaps they didn't here; he hadn't thought of that.

He leered because the women he knew expected him to leer. "Well, thanks, yes. What's your name?"

She told him it was Stella, that she had a place quite near—she had read up on the period. Then she took his arm and said, "Come on."

It was further than she inferred and, after she had said the conventional things regarding the success of the ship, he bragged loudly and noisily the rest of the way. This was more like life, more like home; she was a cute, cuddly little piece too.

An hour later she was dressing. "You found your pleasure; you are physically relieved now?"

He scowled at her. "It was all right, I suppose." Then, irritably, "You hated it, hated every minute."

"When I volunteered, I volunteered to submit, not to enjoy. You have done your duty for my people at the risk of your life. I have done my duty, as far as I am able, by catering to your urges. I am fully aware that it is not

enough but it is something.

He sat upright, his face flushed. "You cold-blooded little—" There were so many obscene words in his throat that they stuck there. "What do you think I am—some sort of animal? I've paid for better women than you and not been insulted." She looked at him with indifference. "Then you were lucky, very lucky."

Back at the base, Randall was blissfully unaware that within a few minutes he, too, would have woman trouble.

On his return he had slept like a log for eighteen hours and, less than two hours after his awakening, had gone into a long huddle with humans and robots.

He was still going over points in his mind when the house-bot announced, "A lady to see you, sir."

"Oh, right." He was not really paying attention. Yes, the robots could erect force bubbles over the cities similar and probably superior to those used by the aliens. Yes, they could bore a submarine pen deep in the cliffs in less than an hour. It would be begun immediately. The robot's words sank in. "A lady!"

"Yes, sir. She has been waiting several hours."

"What does she want?"

"She did not confide in me, sir. I can tell you, however, she has professorships in anthropology, genetic medicine and social history."

An egghead, thought Randall, sourly. Probably an old crow who wants to study me like a rare specimen.

"Oh, show her in," he said ungraciously.

The robot obeyed too swiftly for him to compose himself and he had some difficulty in preventing his mouth from falling open idiotically.

She was not an old crow, she was—

"Captain Randall?"

"Yes—yes—w-won't you sit down, please?" His voice was embarrassingly hoarse. "Coffee?"

She answered in the affirmative to both questions, then gently said, "Please do not be ill at ease, Captain. We are both outcasts."

"Outcast's?"

"By today's standards you are a normal deviant; I am an evasive deviant." She smiled at his obvious puzzlement. "Allow me to explain. You were born with your aggressive instincts unsuppressed. My forebears, although genetically manipulated to pass the suppression on, somehow failed to pass it to me. It happens periodically but, strangely, only in the female strain. There is a small colony of us in our own private village some two hundred miles distant. Although there are no actual restraints, we are not encouraged to associate with normals. As far as I can remember I have never lost my temper in my life but I am advised that since I have no mental restraints I cannot politely associate with normal people. Otherwise, of course, we have all the facilities of civilization."

"Judging by your professorships you seem to have taken full advantage of them."

"One must do something when one is an outcast. Needless to say, my conclusions on many subjects are unacceptable to orthodox science."

He thought, *She has the softest, most gentle mouth I have ever seen, and those eyes...* He kicked himself mentally. *What the hell is the matter with me?*

He said, evenly, "What can I do for you?"

She met his eyes with curious directness. "You have every right to take exception to this but for the purposes of research I would like to study you. Thanks to my professorships I have government authority to do so, should you agree. You have the right to accept or refuse."

His natural reaction was to refuse point-blank but there was something in her warm brown eyes...

He said, cautiously, "What kind of study?"

"A long—" She hesitated. "I suppose you could call it an interrogation, much of which would be highly personal."

"How long would it take?"

"Several weeks, depending on the time you could spare—perhaps months."

He stopped his face's brightening with considerable effort and managed a thoughtful frown. "Look, Miss—er...?"

"My name is Day. Vi-eene Day."

"Look, Miss Day, I'm prepared to make a deal with you. I want certain information from you, also certain of your conclusions. Will you go along with that?"

She thought about it. "I have no instructions to withhold information but my conclusions are another thing. According to my study of history, at periods when mental disturbance was an untreatable complaint, it was not uncommon for the patient to assume that *he* was sane and the rest of the world deranged. I will give you my conclusions, but on the same basis. The conclusions of a deviant are not necessarily valid."

He smiled. "I'll accept. We're both in the same boat apparently." He glanced at his watch. "If you want to start now, I can spare you thirty minutes. We can make arrangements for future interviews later."

"You are very kind." Then she added thoughtfully, "You are not as I imagined. I have never studied a male deviant before, but the telescope of history gives a distorted picture."

"What did you expect—a pirate with a knife between his teeth?"

She took the question seriously. "No, but I expected someone with a harder mind and a grosser attitude to life." She smiled. "Sorry, I am wasting my own time and yours. I must add before I begin that I have a small instrument on my person. It combines the properties of a notebook and psychoanalytical interpreter."

"Psycho-?" He stopped. "You think I might lie to you?"

"It is human nature to answer certain personal questions in such a way as to present the most agreeable picture to the questioner. Do you object?"

He thought about it. "Not really, as long as it doesn't say so. What is your first question?"

"A large and comprehensive one which you may answer simply. What is your opinion of the human race today. "

He frowned uncomfortably. "You want an honest answer?"

"As honest as you can make it."

"Very well. I think you have a sick race here. All this dressing up like characters at a fancy-dress ball, this charade. I don't know what it means but it's indicative of something."

"Thank you. That is a most observant and penetrating answer."

"One moment, Miss Day; we have an agreement, remember? Your conclusions, please."

She paled slightly, then she said, "All right, but you must refer my answer to the parallel of the sick-minded person. Yes, as you have concluded, a sick race, a decadent race, not without courage as you have seen but lacking in something." She sighed. "With the suppression of the aggressive instincts the race lost something—their capacity to love. They are a cold people; they act rightly and show outward affection from principle rather than from principle and emotion combined. They don't *feel* anything and an appalling amount of perversion, sexual and otherwise, has been concealed from you. The only truly moral entities in our entire society are the robots."

Chapter Seven

RANDALL MADE an appointment for another interview the following day but was forced to cancel it.

Relf called, a distraught Relf who skillfully or unwittingly refused to meet the other's eyes.

"We have trouble here—one of your men."

Randall sighed. "Don't tell me—Heston."

"Yes. How did you know?"

"I have an instinct for it. I hope you've got him locked up."

"It's not quite like that. Perhaps I had better bring the girl with me and come out to explain this personally."

"I guessed there would be a girl mixed up in it. What about Heston?"

"He is already on his way and should be arriving within ten minutes."

"Right. I'll have him met by an escort and kept under close arrest until required."

"Is that necessary?"

"Here I conduct my affairs my way."

Relf arrived alone some forty minutes later. "The girl is waiting in the flier. I thought it wiser if I spoke to you first: She is inclined to become hysterical. This is a dreadful business."

"What is?" Randall felt himself bristle slightly. This fancy-dress civilian was out to get one of his men.

For the first time Relf met his eyes directly. "The problem is, they want to get married."

Randall felt his eyebrows go up. "They want to what?"

"Get married. Not a short-term, one week or longer contract such as our culture permits, but whole-life!"

Randall shook his head, wondering what all the fuss was about. "Well, I admit that four days is no basis for—"

"You don't understand. She wouldn't—couldn't—" He floundered helplessly into silence and began again. "No one undertakes a whole-life marriage contract. We lack the temperament and the capacity for enduring affection, but he wants it and, most frightening of all, she wants it." He leaned forward. "He's *done* something to her, Randall. She'll have

to go to a village; do you understand? A deviant village!"

Randall stood up and there was something in his face which made Relf back uneasily away.

"Send the girl in. I want to talk to her—alone."

"Yes, certainly."

"Furthermore, Mr. Relf, there will be no talk of villages here, not on my ship. I intend to get this business sorted out and when I've got it sorted out well decide what to do, not before."

The girl who came in was tiny, sun-brown and almost exquisite. Randall put her down as about twenty and hardly Heston's type. He was to learn differently.

"You won't hurt him, will you?" Her eyes filled with tears. "He's done nothing; please don't flog him."

He stared at her. "Flog him—good God!" He forced himself to smile. "My dear young lady, you're about two hundred years out of period. The Navy doesn't flog defaulters."

"He isn't a defaulter!" Her eyes blazed briefly then filled with tears again.

He said, gently, "There is no question yet of charge or punishment. Believe me, this procedure is only to arrive at the truth."

She almost smiled. "I think I believe you." Then she added sadly, "They will send me away to a village."

His jaw hardened. "Not if I can help it."

"It is the law."

"Not on this ship. If anyone wants to make an issue of it, I'm quite prepared to fight until I know the true facts. In the meantime, you go and sit quietly in the next room. Ask the house-bot for coffee or anything else you want."

When she had gone, he made a gesture. "Authorize the guard to bring

Heston."

Heston arrived promptly. "Left-right-left-halt! Attention! Off hat!" Randall dismissed the escort and looked at the prisoner. "Well, Heston, what have you been up to now?" Heston looked hangdog. "I only wanted to get married, sir. I knew we'd have to ask you but I started there. I didn't know there'd be all this fuss."

Randall looked at the aggressive, sullen face and was shocked. Good God, the man had been crying, actually crying!

He said, gently, "You've been in front of me too many times, Heston. Until now there was no question as to what you'd done. Now, however, there is considerable doubt and, off the record, a strong suggestion of injustice. Suppose you sit down and tell me about it quietly."

"Sit down, sir?" Heston sounded shocked. "There is a chair behind you; sit on it. As far as I am concerned, until I learn the facts you are in protective custody. No charges have yet been laid against you, so we will keep this informal shall we? Start from the time you met this girl."

"Yes, sir." Heston told it painfully. He was not an articulate man and the circumstances were embarrassing. He blushed and stuttered frequently.

"All right, Heston, there is no need to go into the intimate details. What happened afterward?"

"Believe me, sir, I'm ashamed of this, honest. If I'd known, if I'd had any idea—she made me feel like I was unclean, an animal, like. I ain't much, I know that, but somehow it hurt and I lost my temper. I got a quick temper, sir, but it don't last." Tears appeared suddenly in his eyes. "God forgive me, sir, I hung one on her." You did what!"

"I hit her, sir." Heston hung his head, tears running unashamedly down his face. "If I'd known I wouldn't have harmed a hair of her head."

"Very well, go on."

"It wasn't hard, sir, not like I'd land on a man, 'cause even as I threw it, like, I was trying to stop it. She went down and she lay there twitching, like she was in a fit."

Heston swallowed noisily and continued. "I was frightened, sir, frightened and sick at what I'd done, I lifted her on to the bed, rubbed her hands and dabbed water on her face, but she just sort of went stiff. I thought I'd killed her, sir. I was kneeling beside her, sir, and I was just going to shout for help when she shivered and opened her eyes. She didn't say nothing, sir, just looked up into my face, like, and something happened. I can't describe it, sir. It was as if she could see right inside me and clean through. I had the same feeling with her, sir, like I could see right into her soul. I don't know how but it sort of joined us inside. She didn't say nothing, just reached up, put her arms around my neck and drew me down to her..."

He looked up and there was something in his expression which transfigured his features into a strange tenderness and nobility. "There wasn't no doubt then, sir. There ain't now. We belong; we want to get married."

He paused and was suddenly angry again. "When we went to apply for a license or whatever it is they have here, they laughed their heads off until they saw we was serious. Then *they* got serious and said something was wrong with Stella. Some big guy in a white coat comes along and checks Stella on the spot. When he's done, he looks at her like she was a leper and tells her she's a deviant. They want to lock her away somewhere."

Heston paused and looked at the other with despairing incomprehension. "I don't understand, sir. We ain't done no harm. Please, sir, don't let them send her away."

Randall stood up, his face hard. "They won't, Heston, not if I can help it." He made a command gesture. "Send the girl in, please."

She came in hesitantly, but as soon as she saw Heston she ran to him, her face radiant.

Randall sat down with the curious feeling that he was an intruder. "Kindly disentangle yourselves and sit down. Heston, you sit over there and no interruptions, please."

He looked at them. "Heston, I cannot condemn too strongly your assault on a woman. I'm warning you here and now that if it ever happens again you'll regret the day. I believe you when you say you are sorry but it must never occur again—understood?"

He paused, took out his pipe and began to fill it. Then he looked at the girl. "You must understand that I come from a different age where different laws apply. Had we been in the same age, stationed in a foreign port, and Heston had come to me asking permission to marry after such a short acquaintance it would have been my duty to refuse. I am going to refuse now. There will be no bar to your association. You may meet as frequently as Heston's duties permit."

He stopped and lighted his pipe. "If, after a period of three months, you both feel the same, then you will be given that permission. As to your being sent away, in this building, which from tradition is the ship, we are all deviants. More important still, however, is that on this ship, I am the master. . No one gives me orders on my own ship and no one boards or leaves it without my permission. I shall instruct the robots to build separate quarters for you and you may remain here in safety as long as you wish. If anyone wants you taken to a village against your will, they will have to come and remove you by force."

The girl looked at him with tears in her eyes. "I don't know quite what it means but I read it once and I know it infers extra sincerity—God bless you."

Heston made his way slowly back to his quarters, lost in thought.

"Did the Old Man chew you up?" someone inquired.

Heston turned on him. "Don't you ever speak of the Captain in that tone to me, buddy, or I'll push your teeth down your throat, see?"

"All right, all right."

Heston glowered at him. "Remember it then. And that goes for the rest of you, officers and all." He turned away, unable to put into words the intensity of his feelings. Captain Randall was the best damn skipper who ever walked the earth; like a father he was. Heston was ready to die for him at the drop of a hat.

Randall was occupied with other matters and deep in thought.

Relf had to wait a long time and when he entered there was a certain coldness in the atmosphere.

"Just how many of your people are opposed to my presence here, irrespective of whether I fight their battles for them or not?"

Relf looked into the cold blue eyes and saw that deception was pointless. "About sixty percent. The government had to club their votes to force it through the House."

"Many say they would fight if they could. How many?"

Relf shifted uncomfortably. "Say ten percent of those who say it."

"Select the first ten."

Relf half rose. "Pardon!"

"I think you heard me the first time. Select ten."

"But to what purpose? You know they can't fight."

"When I've finished with them, I think they will be able to."

"How?"

Randall told him.

For a long time, Relf sat still, his face pale and working slightly. Finally he said, "It's an appalling risk. The Council will never agree."

Randall leaned forward slightly. "Mr. Relf, I have nothing against you personally but your government will agree or we pull out."

"But you can't; you're involved." His voice cracked a little.

"I'm involved with a dangerous enemy who in the long run will undoubtedly win, but I should no longer have to consider you. If I could knock out or stop some of these aliens by clobbering one of your cities I'd do it."

Relf looked at him, his face ashen. "You wouldn't dare."

"Care to bet? Listen, Mr. Relf, I don't propose fighting this war with one submarine and its complement, offhandedly assisted by twenty or so courageous robots you don't happen to be using. If your people and the

present-day human race, for that matter, want to survive they will damn well have to fight. You will, therefore, select the first ten men. They will be young, strong, and preferably obnoxious. Should this idea work, they will immediately be conscripted and take their future orders from me. In short, they will lose their citizenship and become members of the armed forces."

"Forsythe! The Council won't hear of it." Relf was sweating.

"Tell them my terms, but don't waste days talking. After that we'll hold our little fraternization party. I don't care how you do it—select your political opponents if you wish—you appear to have few scruples here. Oh, yes, and before you go—about the girl. If any of your people want her, tell them to come and get her. She's under my care and if anyone among you wants to take on an armed guard with orders to defend her, he's welcome to come and try."

Relf stood up shakily. "God knows the outcome of this. The Opposition warned us of repercussions of this kind but we were so desperate..." He sighed and shook his head tiredly. "Captain Randall, I admire your drive but deplore your methods. You're a damn pirate."

Randall smiled. "You have learned a lesson: never hold a tiger by the tail."

The robots had erected a blue plastic marquee on the golden grass and the guests were beginning to arrive. The Council had called it a fraternization party, but Randall referred to it mentally as a press-gang ball.

He watched the guests arrive by robotic fliers in ones and twos. He didn't know if they were particularly obnoxious but they were all characters—Vikings, cowboys, Roman Senators, cavaliers.

He looked over his own men and smiled inwardly. Heston, Miller, Dombey, Towson, Blake.

When they all got inside for the banquet, the guests were not happy and said so in the peculiar lilting language of the age until Forsythe reminded them sharply that since this was a fraternization party it was only common courtesy to speak the language of their hosts.

A tall man in the dated costume of a cavalier immediately took advantage of the reprimand.

"Deviant language? Certainly, Councilor." He flicked some imaginary dust from his frilly lace cuffs and beamed unpleasantly at the nearest sailor. "Tell me, my good man—no, not too close, please—who is the odd character by the door?"

He asked the wrong question of the wrong man.

Heston's face darkened and his chin jutted dangerously.

"Who do you mean, exactly? "

"Are apes shortsighted, too? *There*, man, the brown-faced cretin with the pretty golden rings around his cuffs."

Despite warnings, Heston would have at that moment hit the insulter anyway. As, however, he had been given pre-party license, he applied science. He hit the cavalier right in the mouth with a straight left and followed it with a savage right hook.

The cavalier toppled sideways over a small table laid for the coming meal and he, the cloth, silverware, a pitcher of water and a basket of small white loaves crashed to the floor.

He lay in the mess for some seconds, his body twitching curiously, froth trickling from the corners of his mouth. Then, very slowly, he opened his eyes, raised his head and shook it twice. He struggled to his knees; there was a spreading bruise on the side of his jaw, one of his teeth appeared to be missing, and his upper lip was puffy and bleeding. The huge cavalier hat lay on the floor and the long-haired wig had shifted, the wavy hair obscuring the sight of one eye.

Shakily he reached up and dragged it off, exposing a completely shaven scalp.

He blinked, as if trying to clear his vision, and then suddenly his eyes blazed.

He sprang to his feet, a big, shaven-headed man, who no longer looked decadent.

"You hit *me—me!* You ape!"

His hand moved to his side and what had looked like a purely ornamental sword suddenly hissed from its sheath and pointed straight at Heston's chest.

He never lunged forward. Miller kicked at his wrist and the sword sailed into the air.

It was, however, a signal for a general melee. The characters surged forward, wavered and rolled back. Heston called, "Thanks, mate," to Miller and hit the nearest cowboy, Miller turned and knocked down a Roman Senator.

Characters went down all over the marquee. When they rose, however, they were different: they fought back. They were outclassed, terrifyingly wide open, but they fought

"All right, all right, break it up!" Duggan dragged the fighting men apart with his huge hands. "That's enough, Miller. You've had your fun. Over there. You, too, Heston."

The characters surged forward and found themselves facing an armed guard with fixed bayonets. They were herded into a corner where they stood glowering with bloody and bruised faces.

Randall stepped forward. The exhibition had gone against his sense of rightness and fair play but he had been forced to do it.

He looked at the characters in silence for some seconds; then he said quietly, "You have all, at one time or another, expressed a wish to fight. You have all, I understand, loudly deplored your inability to do so. It is now time for you to ask yourselves if these were insincere claims, boasting or the simple truth.

"Gentlemen, I owe you a sincere apology. You have suffered a considerable affront to your dignity and a great deal of physical violence. I deplore this. I deplore its necessity, but there was no other way. Only a short time ago we discovered, quite by accident, that the repressed part of your natures could be released.

The method employed was crude in the extreme—a hard blow struck

with intent by another person. The shock was sufficient; the incredulity, the abhorrence, the flood of resentment and the resulting changes in the body chemistry all helped to break and wash away the repression forever.

"My men were acting under my orders. They bore you no personal malice and I know they would wish me to offer you their sincere apologies."

Randall took his pipe out of his pocket, looked at it and put it back again. This was going to be the hardest part.

"It was my intention," he continued, "to conscript you all immediately into the beginnings of an armed service, but I cannot do this. In my age certain principles were held to be basic and I can't depart from these principles without betraying both my own time period and myself.

"You no doubt appreciate that you are deviants now, according to the standards of your age and, as such, subject to the laws and restrictions your government sees fit to apply in such cases. But you are free to return to your civilization, or you may volunteer to fight under my command."

The man who had once caricatured a cavalier took a step forward. "Why us? What did we ever do to you?"

"You did nothing to me. In the first place, I did not select you and, in the second, I asked only for those who had expressed, repeatedly, a willingness to fight.

"If you want a logical reason for my actions, I'll give it to you. Gentlemen, irrespective of whether you were directly responsible or not, you pulled me into this age to fight a war you were unable to fight yourselves. You must see, from logic alone, that the task is hopeless. Against the massive forces opposed to me I am not even a rearguard, no more than an irritant. I can, when the true situation is known, be brushed aside with contempt and forgotten. To fight a successful war, to survive the assaults of an organized and numerically superior enemy, it will be necessary to mobilize not only the people of this planet but those of the entire empire and Earth itself. Your industries will have to be adapted to war production and the entire resources of science directed to victory. You must see from history that this is true. Yet your people, either in ignorance or blind faith, expected me to work a miracle with the crew of a submarine and thirty robots. Is this the intelligent reasoning of an

allegedly superior culture?"

The cavalier glowered but when he spoke his voice was controlled. "Mr. Captain, we are not subject to your discipline yet. We appreciate from reason both the logic and the pressures which forced you to take the steps you did. Logic and reason, however, do not compel us to regard your methods with pleasure nor, for that matter, incline us to be kindly disposed toward you. It is significant to all of us that of those selected, *every* one should be chosen from the junior benches of the Opposition."

Randall smiled at him without humor. "Gentlemen, since you choose to be frank, so will I. Your age despises me and I, for my part, hold little respect for yours. I suggested that your minister select from the Opposition, having observed that there were few scruples here. The fact that the suggestion was seized and used only serves to demonstrate my point."

He stiffened briefly. "Gentlemen, you will be given quarters and your abrasions will be attended to. You have twenty-four hours in which to arrive at a decision. Good day."

Almost as soon as Randall was back in his office, he received a message from Intelligence.

"Well, Ford, what is it?"

"You have the enemy worried, sir. We have just intercepted a message ordering larger forces to this planet. The equivalent of four battalions, sir. With this contingent are ten atmosphere Mlucks—presumably aircraft—and a special investigation unit."

Randall said. "Thanks," dryly.

"There is one other thing, sir, and, if I may express an opinion, it should be investigated. There is an electronic disturbance here." A map appeared. "Right opposite Latin Bay. It could be an explosive device, an electronic accumulator for example, or it could be a matter-transmitter. If it's the latter, something will be coming through it fairly soon. "

Chapter Eight

LATIN BAY was like a fjord, the green water penetrating almost a mile

inland between high, bronze-colored cliffs. At the top of the cliffs was a mixture of plain and forest

To Cooper, pushing his way cautiously toward the danger spot, the entire scene had a curiously dreamlike quality. The impossible golden grass was almost waist-high and the blue, willow-like trees not only swayed continuously but their leaves made strangely musical yet plaintive sounds in the slight wind.

"How much farther, Dodge?" He still felt uneasy with robots but was glad of this one's company.

The robot, gliding just above the grass, said, "Only a few hundred feet now, sir."

"Thank goodness for that." He glanced quickly left and right to see if the men were keeping correct space and distance. With him, beside the robot, were four heavily armed and—in this heat—highly disgruntled sailors.

They came to a small glade and the robot said, "Here, sir, roughly by that small bush but slightly to the left. "

"I can't see anything."

"It's in the grass, sir. I cannot see it myself but I can perceive the electrical disturbance around it which is increasing, incidentally."

"You mean it's building up to do whatever it's supposed to do?" Cooper was aware that the question was slightly inane but the robot understood.

"Yes, sir, if it's an accumulator device it will blow in about seven minutes, but I don't think it is."

"Why?"

"It would be rather pointless out here."

"That may comfort you, Dodge, but it provides little solace for me. Missiles do go astray, you know."

"True, sir, but I find it more logical to assume that it is a transmitter. If something is attempting to gain a foothold on this continent by stealth,

this would be a logical place to choose."

"If it is a transmitter—when?"

"Approximately five minutes, sir."

"I see, right." Cooper strode forward, his long legs carrying him well into the glade. "All right, close up. You, Miller, in that hollow; Townson, behind that bush. Combes—you have the Sten—behind that rock, and don't forget these rounds have been gimmicked. If any of those shots are fired short you'll blow yourself to kingdom come. Sparks, in that clump of trees, and don't fire unless Combes is in trouble; you're there to cover his back."

He paused and drew a deep breath. "Now listen. None of you will use those weapons unless I give the order to fire—is that clear?" He produced his service revolver. "On the order to fire, listen for this. Understood?"

He returned to the robot. "I suppose we'd better find some sort of cover ourselves. How much longer?"

"About two minutes, sir."

To Cooper, it seemed like six years. This was his first taste of action and he could feel the sweat crawling like a multitude of insects down his back. He told himself it was the heat but he knew he was only deceiving himself. Probably why the Old Man had sent him... to gain experience.

To ease the tension, Cooper tried to take an intelligent interest in his surroundings. That bronze rock, for example, looked exactly like granite, probably was granite, only he had never heard of bronze-colored granite. Come to that, who has ever run up against blue chalk? "Now, sir," said the robot.

Before Cooper could take in the words, there was a hollow, rather watery plopping sound from the center of the glade and a brief swirl of gray mist. When the mist cleared, there was a canister in the grass. He assumed it was a canister because it strongly resembled those he had seen dropped by planes on practice supply drops.

Before its presence had really registered, however, the plopping sound was repeated and there was another swirl of gray mist.

When it cleared, Cooper found himself on the verge of pinching himself. Where the mist had been was a man, a very small man in a baggy single-piece brown tunic which was open at the throat. The man also wore a yellow skullcap with what looked like a scarlet feather rising from the front and following the curve of the skull almost to the back.

A blasted elf or something. Cooper was almost as shocked at his own conclusions as by the man himself. He even had a flattened, puckish and cheerily insolent kind of—hell, it's a kind of green—face.

Cooper pulled himself together with an effort. Elf or no elf, he had to *do* something.

With calmness and determination he'd never imagined himself capable of, he stood and walked out into the glade.

"I don't know if you speak English—I hope for your sake you do—but you will remain quite still. You will turn and face me and you will raise your hands above your head."

The man stiffened, then very slowly began to raise his hands.

"Fine, keep it like that. If you've got any ideas, forget them—you're completely surrounded."

The man, hands now fully raised, turned slowly to face him. He smiled impudently, his face looking more puckish than ever.

"Well, well, allow me to congratulate you." His English was so lilting that it was almost unintelligible. "I did not expect you to react so swiftly."

He looked Cooper up and down, interestedly, but with a certain respect. "Clearly you are one of the period warriors. Most interesting. Allow me to introduce myself. I am Keener, an intelligence agent from the Revain."

"You'll have to prove that. In the meantime, you are my prisoner."

At the barracks, the one-time cavalier stood before Randall's desk.

"We don't like you or your methods, Captain, but they do contain a perceivable element of justification. Eight of us, therefore, have decided, reluctantly, to throw in our lot with you."

Randall looked into his face unsmilingly. "You thoroughly understand your commitments?"

"I know I can be shot for desertion, treachery and a few other misdemeanors. Furthermore, we are quite convinced you would do it. We all decided that we preferred a devil we understood."

"And the remaining two?"

Throwing themselves on the doubtful mercies of our civilization—good luck to them."

When he had gone, Randall sent for C.P.O. Duggan.

"I seem to remember from your records you took an assault course during the war, Duggan."

"Yes, sir, '42. They were forming a naval commando then."

"You passed?"

"Yes, sir, but in an instructional capacity, like."

That's what I hoped. Can you remember any of it?"

"Fair amount, sir. I still have the manual."

"Good. I have a job for you. I want you to take those characters and turn them into fighters. We've got to have a basis for a ground force, an army, so make it really rough. I respect your judgment of men so keep your eyes open for officer material. I have already given orders to the robots for uniforms and equipment—should be here in thirty minutes. See that it's issued as soon as possible and get those characters working before they have time to think."

"Yes, sir."

"Any questions?"

"Start from scratch, sir?"

"Rock bottom. Appoint anyone you need to help you. It's a big job, Duggan."

"Yes, sir. I'll start right away."

As Duggan left, Randall glanced at his watch. He hadn't time—blast it, he'd make time.

"If Miss Day is available, please tell her I can spare a few minutes."

When she entered three minutes later, there was a subtle change in her which Randall noticed instantly but was unable to explain. Her face was less reserved and far more friendly and her warm brown eyes looked at him with understanding.

"I owe you an apology." She hesitated. "I don't know how to tell you this. I'd better explain in a roundabout way. I am proud to know you; not only do I respect you as a man, but you confirm my theories beyond doubt. You, as the alleged deviant, have displayed both justice and compassion—alien words to our culture."

"I'm afraid I don't quite understand."

"I have spoken with the girl Stella and your sailor, Heston. I was deeply moved by all they told me—moved and a little shocked."

"Shocked?"

"Shocked by my own period."

He frowned. "Just how did this suppression business come about? No one has ever told me."

"No? Perhaps it is understandable. It is not a period of which we are proud, although the pressures at the time were frightening. I will try to give you a picture of it. There was a war scare, you see, and then another and another. In the end humanity arrived at what is now known as the Crisis. This was the super war scare. It went on for months and filled every item of news with mobilization, men marching, pictures of weapons, rockets, bombs, politicians issuing warnings, denunciations and threats, frantic exercises in the streets, preparing for the worst."

"What do you do when the bombs fall, with a one-in-two-million chance for survival? After two solid months of this kind of thing, humanity cracked. En masse it moved from crisis to psychosis and from psychosis to

chaos."

"Man panicked individually or in a mass and where it was individual it was infectious. Entire communities turned and ran to what they thought was a safe place."

"Let me give you a few examples: literally millions put out to sea from coastal communities in anything that would float. The reasoning was that nuclear devices were so expensive, so decisive and so accurate that no one would waste them in the sea. Do I have to tell you how many survived that exodus?"

She shook her head slowly. "It is pointless to tell of chaos and death on the highways, of the endless lines of refugees often trekking in opposite directions to what they thought was a safe place."

"At the end of ten years, when humanity began to sort order from chaos, it was estimated that nearly as many people had perished as those who might have died in an atomic war."

"Nations no longer existed; those who had escaped often ended up at the opposite end of the world." She stopped. "Have I said enough?"

"Too much. The human race emerged from a nightmare and took panic steps to prevent a recurrence. May I change the subject and ask you about us? What happened and how long is it?"

She looked at him sadly. "All of it? It's not a pretty story."

"Spare me no details."

"Very well. They lifted you and your vessel about a year before the Crisis. Your vessel was coated in a preservative plastic and you, yourselves, transferred to airtight cubicles containing preservative fluids. There you remained until mankind stood on its feet again, roughly one hundred and fifty years.

"At this period, World Government was trying to force through the Compulsory Suppression of the Aggressive Tendencies Bill and you were physically resurrected for propaganda purposes. They more or less refitted and restored your vessel, dressed your bodies in the appropriate uniforms and placed you on public display.

"This, however, was not enough. Some warped genius hit on the idea of turning what was outwardly a wax museum into a demonstrable argument. Your bodies were resuscitated, a section of your brain stimulated and your subconscious memories tapped."

She paused and looked at him, her face mirroring both apology and pain. "They put you on display, Captain Randall, as an outwardly living exhibit. On a given signal, you and your crew outwardly lived and responded to stimuli. In a huge transparent tank, constructed for the purpose, you and your crew relived the actions of war. You dived in your ship and fired missiles. You rose to the surface and the crew fired the weapons. Even when the bill became law, you were still popular entertainment. Syndicates made a lot of money taking you on tour... several years in what had been the United States of America, many more in various other parts of the world."

She paused and sighed. "After that, you were embalmed once more, until, seven hundred years later, this planet was attacked and cried to Earth for help. You and your crew were the only help they could send; they, too, could not fight."

"Thank you for telling me, for your honesty." He laughed briefly. "I haven't given you much help this time, have I?"

"You are very kind to give me any time at all."

"No." He was suddenly abrupt. "Not kind, self-indulgent. I like your company."

She looked at him and suddenly there was an intense link of sympathy and understanding between them. "Thank you. I think we understand one another."

"Do we?" He was suddenly embarrassed. She laid her hand briefly on his. "I do. When *you* do I shall be waiting." She turned and left the room.

Before he could think about it, there was a call and the projection of Cooper appeared.

"Something came through the transmitter, sir—a man. He claims he's a Revain intelligence—"

His words were interrupted by a priority call.

"Hold on, Number One." Randall made a gesture. "Yes, Ford?"

"Long-range instruments indicate the presence of two vessels rising above the northern continent, sir. A course check suggests that one is heading for Markstown and the other heading for the southern coast, sir."

"How big are they?"

"In your measurements, sir, about two hundred feet long and fifty feet across but narrowing at the stern. In the screen they look rather like an Earth flatfish, sir."

"What speed are they making?"

"They are in no hurry, sir, only about seventy-five knots so far. On the other hand, an analysis check suggests nuclear armor. This is one of the most resistant substances known to science."

"Very hard, you mean?"

"Not quite, sir. This is a substance with what we call linked cohesion. It's like the idea of opposing human muscles, sir: the more you pull or push, the more they resist. In this case, the atomic structure of the substance thickens or adjusts to the type of attack, be it impact, heat or attempted disruption."

"Is the force bubble over Markstown?"

"Yes, sir. As you are aware, it is different from the kind employed by the aliens. We hope it is undetectable."

"Keep a tight check on both ships and give me a call, if possible with a picture, as soon as the ship approaching Markstown comes into human visual observation."

He broke contact and returned to Cooper.

"Good work, but all of you make full speed for the flier and tell it to push back here at maximum. Our friends have just launched the first air assault."

When he had broken contact, he smiled grimly to himself. Air assault! From what Randall had heard the aliens could fill the skies of every planet in the human empire and still launch a full-scale assault on the Revain. So for the enemy this was still a minor campaign to be concluded swiftly as a side issue with limited forces.

Outside on the level golden grass, Chief Petty Officer Duggan had just begun his task and was looking at the characters almost sadly.

Strangely, the language and attitude of the old days was returning to him clearly and passing uncensored through his lips.

"You miserable bunch," he said agreeably. "I've got to try to make men of you." Then, almost sadly, "Before I'm done with you, you're going to hate me."

In Randall's office, the prisoner stood at attention between two armed sailors.

"Your story may be true but I have no time to go into it now."

"You have trouble here?"

"The trouble may be due to you. An enemy vessel is coming slowly up this coast obviously searching, or should I say expecting a signal?"

The prisoner made a faint clicking noise with his tongue. "You are at liberty to assume whatever you wish."

"I have to until proved wrong. In the meantime, you will remain here under guard. You may chew on the thought that if anything happens to us, it will happen to you also."

At that moment a picture appeared, showing the pale green sky and a black spot in the center of it.

"Enemy vessel now within human vision, sir."

The picture widened, showing the city below and then narrowed again, concentrating on the vessel. Its size increased as they watched, a long black shape strongly resembling a flounder.

"The other vessel is still coming slowly up the coast, sir. It stops

periodically and, judging by the disturbance when it does, it is checking with instruments."

Randall felt himself pale. That ship was not checking for amusement; the aliens had obviously put two and two together and made four. Perhaps certain instruments had taken pictures, or maybe fragments of shell or torpedo had been found and the correct conclusions drawn. *The* aliens were looking for a certain type of seagoing vessel and obviously they meant to find it.

The vessel approaching Markstown now filled the screen and, despite its flatness, it looked predatory and strangely shark-like.

"In another two minutes, unless it alters course, it's going to hit the bubble, sir." Ford's voice somehow conveyed excitement. "Either they don't know, haven't bothered to test, or it is undetectable to their instruments, as we hoped."

Randall, crouching forward, tried to will his muscles to relax but was unsuccessful. He was shocked to find himself saying aloud, "Keep going, you bastard, just keep going—"

"One minute, sir; no change of course."

He became aware that the two armed guards and the prisoner had edged forward and were now watching the scene with equal tension. At that moment he lacked the willpower to order them back.

"Half a minute, sir. Speed seventy-five point three."

Randall found himself trying to work things out in his head. This was the age-old riddle, wasn't it? The irresistible force and the immovable object. One knew of course that the two conceptions could not exist together but the riddle was there in theory. A nuclear armored air juggernaut and an impenetrable force bubble.

"Ten seconds, sir. She's running straight at it. Eight-seven—six—"

Randall never heard the rest of the count. It seemed that the only faculty remaining to him was his vision.

He did not know quite what he had expected, a giant explosion, a

searing flame perhaps.

The two hundred foot vessel stopped as if it had run into a brick wall. Stopped dead at seventy-five knots and then disintegrated—yet not as if from an explosion. Rather, it appeared that the brick wall had turned into an invisible and rapidly revolving air-screw. Dust, smoke, debris and huge fragments of the vessel were flung outward in a huge fountain. Then all that remained was a cloud of dust and black falling fragments.

Randall was aware that he cheered hoarsely, that the guards cheered and that the prisoner made a loud musical piping noise which obviously implied the same delight.

"Magnificent, wonderful. We have nothing like that, but nothing." The prisoner's face was so elated, so filled with enthusiasm that Randall felt himself smiling back.

"You'd better sit down. Well have a chat."

"Yes, yes. We have force bubbles, of course, but ours are visible in certain conditions. They are also detectable and the aliens give them a wide—wide—"

"Berth?"

"Yes, thank you. A wide berth!"

Randall remembered his position and managed to look neutral. "Have you weapons capable of bringing down one of those ships?"

"In my container, yes, but the range must be reasonable. Fortunately the aliens are only using Muck ships here and not the Gum vessels he employs against us." He smiled apologetically. "With due respect and to bring comparisons to your age, comparing a Muck with Gum is like comparing an observation balloon with a front line fighter squadron."

"You seem particularly and frighteningly familiar with the situation here."

"One of our monitoring units picked up this planet's call for help to Earth. We did not know what they sent but when the aliens reported resistance, we did some rapid checking."

He paused and looked at Randall almost accusingly. "You speak a dreadful language. I had to undergo throat surgery to enable me to speak it."

"Why are you here?"

"For intelligence purposes and, if possible, to establish an alliance."

"In short, you are on our side?"

"Of course."

"That you will have to prove."

"How?"

"There is an alien ship coming up the coast right now."

Chapter Nine

THE REMAINING enemy vessel, apparently unaware of the fate of its companion ship, took its time. It stopped and circled several times while high sensitivity instruments went into action.

The aliens were by no means fools and, as Randall had concluded, they had successfully put two and two together. They had checked missile and torpedo fragments, analyzed an oil slick, the chemical residue of underwater explosions, and correctly duplicated a warhead. Obsolete—how? Resuscitation was not a new technique.

Within ten days their experts knew they had been attacked by an underwater vessel, dating back in Earth's history to one thousand two hundred and approximately fifty years. If they had the ship then they must have the crew, so the rest was easy. Everyone was happy about the discovery, particularly the Department of Psychology, whose point had been confirmed beyond doubt—that the present-day human species were incapable of resistance.

Now all they had to do was find the vessel, remove it with its crew and go on as before.

A mile from the bay where the *Euphrates* was hidden, the alien vessel

slowed and descended to a mere two hundred feet. Her instruments were getting metal reactions beneath the ground.

The alien commander ordered a reduction of speed and the vessel proceeded slowly onward. It was, however, prepared for attack and on the alert. There was no apprehension; the chemical explosives of these primitives could be dismissed with the contempt they deserved.

They were not prepared, however, for the concentration of fire nor the rate of discharge.

The spare Oerlikon, concealed in a clump of trees, opened up with a clatter at what was virtually point-blank range. It was joined almost instantly by four batteries of quadruple machine guns from hidden gun pits.

The underside of the alien vessel vanished in a series of continuous flashes and swirling smoke. The gimmicked missiles made no impression on the nucleon but the substance had limitations. It was quite incapable of dispersing or absorbing such a continuous series of heavy impacts. The vessel jerked, bucked and yawed and, for an instant, tipped dangerously sideways.

Inside, the vibration was considerable and disconcerting. The Second Officer lost his balance and fell over and several banks of instruments became unreadable, which was fortunate. Had one bank been functioning, they would have immediately indicated a power concentration on the ground below.

As it was, the Revain power-projector built itself up to release-point unnoticed.

Randall, watching the battle from outside, saw the alien set up his weapon without particular confidence. It didn't look like a weapon; it looked, and was, nothing more than a brass-colored triangle on a spindly sort of tripod.

Reener made a movement with his fingers and the triangle began to hum softly. In the center a tiny spark of white light appeared, a spark which rapidly grew in size until it became a sphere the size of a tennis ball.

There was an abrupt rending sound and suddenly the ball of light was

racing up toward the ship, leaving a trail of bluish light.

Randall did not see it hit but a jagged hole about ten feet wide suddenly appeared in the underside of the vessel.

It was a signal for the guns to open up again and they did so with enthusiasm, aiming at the hole.

Presumably a large number of missiles were accurate, passing through the hole and exploding within. The vessel jerked; the nose rose as if on the crest of a huge invisible wave and then, as if riding down the opposite side, dropped again. There was, however, no invisible trough to level it off. The nose continued to drop, then, as if suddenly kicked, the vessel plunged downward.

Randall shouted, "Down!" and flung himself flat. As he dropped he was aware of others following suit.

The ground jumped and shivered beneath his body and there was an enormous crumpling sort of crash. A series of rending and tearing noises followed, then silence.

He rose, half expecting an explosion, and saw nothing but a huge pall of dust hiding the edge of the cliffs and the sea. "Come on." He drew his service revolver and strode forward. He was aware of support: a ragged line of sailors, most of them armed and with fixed bayonets, two characters, now in singlets and khaki trousers, a solitary robot—Bentley?—and Keener.

Keener came close. "Be careful, there may be survivors. If so, they will fight."

"Thanks." He shouted orders for the men to spread out and approach with caution. He ordered the two characters back and noted with surprise that they resented the order. Both had been carrying makeshift clubs.

Before they had gone a hundred yards, the dust began to disperse. Randall could see the vessel high on the cliff some eighty feet from the sea. The alien craft lay on its back, the jagged hole in the underside clearly visible. The nose was a crumpled wreck of twisted plate and protruding girder. There was a large hill of torn soil in front and the vessel had ploughed a huge furrow in the earth. Occasional wisps of vapor rose but

there was no outward sign of possible fire or explosion.

When they were closer, Keener called, "Survivors!"

"How do you know?"

"I have instruments." He touched the feather-like object on his yellow hat. "This serves many purposes."

"How many survivors?"

"Ten or twelve."

"Will they surrender?"

Keener smiled twistedly. "The species surrenders only as an individual; while a witness remains alive who might later report the matter, they will fight to the end."

"I want one alive."

"Then you will have to be very lucky."

"Perhaps. What will knock them out, say in the way of gasses?"

"Well, a simple formula—"

"Tell the robot. We might get it here in time."

"I have not the technical language."

"Oh, for—" Randall never finished the sentence.

Something appeared from the jagged hole in the under side of the alien vessel and there was an odd chattering noise.

About sixty yards in front of them, soil and clods of earth geysered upward and a hole appeared. The hole became a ditch which zigzagged toward them, spewing soil. It was as if an invisible plough were rushing erratically in their direction, leaving a smoking furrow behind it.

From somewhere on his right, there was a solitary rifle shot and the ditch stopped abruptly. On the alien vessel something which had climbed

out of the jagged hole jerked and toppled inside again.

"Nice shooting." Randall was aware that he was talking to himself.

Something else appeared and there was an immediate clatter of small arms and whatever it was vanished abruptly.

By this time they were a bare ninety feet away and the vessel lay huge and black in front of them like a stranded fish.

A Sten thudded angrily and, out of the corner of his eye, Randall saw something black roll slowly down the mound of earth near the nose of the vessel.

Two sailors appeared, dropped flat and fired into the wrecked nose of the vessel. In a few seconds they were joined by two more.

Twenty minutes later it was all over; there were no more survivors.

Randall climbed a small mound of churned earth by the ship and stopped. On the opposite side of the mound, sprawled on its back, was a dead alien.

At first glance, the thought that occurred to Randall was *Bumblebee*. There was something about the squat body with its spindly legs which instantly brought to mind an insect. On closer examination, however, it was clear that the creature was a mammal, although there were still aspects suggesting something else. The skin was black, but not the warm black of the colored peoples of Earth. It was a shiny polished black like the wing of a beetle.

The face was in no way human. It bulged out like a thirteenth century helmet with a closed visor. On each side of the bulge were orange-colored pupilless eyes.

The thing had a six fingered hand, with a squat thumb protruding from the center of the palm.

The creature was heavily built and wore a short cloak of some gray material which hung halfway down its back, and nothing else. There was nothing about it to suggest male or female.

He sighed inwardly and looked at the alien again. So that was the species of Nerne, one of an endless chain of creatures stretching away to God knew where. Almost a factory product, come to think of it, with a vast area of storage space containing replacements. Worse, the blasted factory was still pouring its goods off the production line at maximum effort. Who could hope to win against an enemy who could toss away a complete army division with the same indifference that he, Randall, would toss away a spent match?

"It isn't quite as bad as that." Keener was staring up into his face.

"Are you reading my thoughts?"

"No, only guessing what you are thinking. I know how I pondered these Nerne when I first saw them."

"I was thinking of their numbers."

"It is a frightening thought but it is not always decisive. One of our most resounding victories, although local, was brought about by exploiting the numerical superiority of the enemy."

"How did you do that?" Randall was interested.

"May I simplify? Call a planet an island and you will see it more clearly. You hold—what shall we call it?—North Island. North Island is equipped as a base to handle five hundred vessels and cater to the needs of half a million men. One day a report comes in that the biggest war fleet in living memory is heading straight for you. You are not to know, of course, that ninety-five percent of this giant fleet are dummy plastic shells.

"Any intelligence faced with this kind of information is apt to take panic measures. Your nearest neighbors, Eastern and Southern Islands, are too far away to lend big ship support in time, so you have to make do with what you have—the matter-transmitters. You have men funneled through in floods, and your garrison grows from half a million to seven million in a matter of days. You can't put a large vessel through a matter-transmitter but you can get small ones—the equivalent of your period motor torpedo boats. Before you know where you are, you've got more than three thousand and you're only equipped to handle five hundred. You've stores for half a million men but suddenly you've got to cater for nearly eight. You haven't room for the ships, nor the fuel, and

suddenly it's chaos. It's like thirty men in a room designed for three."

Reener smiled, an infectious, elfin kind of smile. "We hit Eastern Island and Southern Island simultaneously with two small fleets. Both had funneled so many men and ships to Northern Island that they were virtually defenseless. We wiped out both garrisons.

"At this period a larger fleet, which had been sneaking in from the opposite direction to the dummy fleet, hit the congested island without warning. It was a massacre; the aliens lost almost as many ships from collisions and panic takeoffs as we knocked down."

He paused and looked at Randall thoughtfully. "Now make these island planets in the vast sea of space. For every ship multiply my figures by ten thousand; for every million men multiply one hundred thousand and you will have some idea of the magnitude of that defeat."

He sighed, his expressive elfin face suddenly weary and old. "Victory, defeat, it means nothing. We have been fighting this war for three centuries but the million we remove today, the Nerne can replace with four million tomorrow. Slowly but surely we are being pushed back. Oh, yes, yes, we both have super weapons, devices capable of wrenching apart a planet and strewing its ashes across the galaxy. We are both afraid of them: the Nerne because it would deny them the living space which means survival, and ourselves because we hold so little. We thrust, therefore, and we parry but survival forces its own laws upon us both."

Randall nodded sympathetically. "Is there anything in this ship to help?"

"Nothing. We know the Nerne weapons as well as our own."

"Do you mind if I hand everything over to the robots for testing? Maybe they could suggest improvements or modifications."

Reener's face brightened slightly. "That is an excellent suggestion. Your human-constructed robots, what I have seen of them, stagger me."

"In which case you won't have any objection to their studying your weapons for the same purpose."

Reener's eyes widened, then he laughed. "A demonstration of good

faith. You are an astute man, Captain Randall. Yes, most certainly."

"Fine." Randall nodded but his eyes were cloudy with thought. "Have you ever paused to think what you're up against, Reener?"

"I do not quite understand you."

"Every time you remove one of the enemy, you do him a favor. Although, militarily, he loses a unit, it makes that much more space on the home front. You—you and I—are attempting the impossible. We're telling the tides to go back or trying to empty the ocean with a teaspoon. In the long run, we, or those who follow us, are bound to go under. "We know," said Keener, soberly. "We know but we cannot afford to let it fill our minds."

"It fills mine." Randall was frowning. "I can't see an answer but I think there must be one. Look, you said the robots stagger you; why not put it to them? They can link in with the city computers—huge but static robots. Given all the data, they might come up with an answer."

"If I thought it would do any good... Let us walk back and I will consider it on the way."

Before they had covered a hundred yards, however, Keener said, "It is a chance, a hope, and one cannot afford to miss it. Yes, I agree."

Randall nodded. "It might turn up something; the memory banks of the city computers contain the sum total of all human knowledge, including the military history of the race." As they approached the barracks, Duggan was back training the characters.

"Company! Wait for it, you miserable clowns. Company, by the left, quick march! Left, right, left, right. You, pull your shoulders back there—"

Keener came to a dead stop. "Surely they are members of the present-day human race."

"Yes, as it happens, they are."

"But this is beyond belief. Our psychiatrists have been into this matter most thoroughly and advised our staff that the human race had suppressed its combatant instincts."

"Well, yes, they had, but by sheer chance we discovered a way of breaking the suppression. I had to put on a lot of pressure to bring it about and then I only got eight, but it's a start."

"But how—how?"

Randall shifted his feet uncomfortably. "Well, to be quite candid, we punched their heads."

"You did what?" Reener's eyes were so wide that they seemed to fill his face.

Randall explained the situation carefully.

Reener's face crinkled slowly and he made curious musical sounds which reminded Randall vaguely of reed pipes. It was some seconds before he realized that the sound was laughter.

"Randall, sir, you are an ingenious buccaneer. You have not only restored my faith in your race but you have given me hope." He became serious again. "When we first became aware of your people and its problems, our chemists devised a small pill—a pill which could be taken orally and which would have restored a human to normal balance within less than twenty minutes. We could not force this upon your race, of course, and since they hadn't then been attacked, warnings or advice would have been pointless. Perhaps now, however..."

"Perhaps, as you say, but I'd like the robots to get down to our problem first."

Once back, Randall called Ford and explained the situation.

"I will link with the city computers, sir." There was a brief silence, then, "The computers lack sufficient data, sir. If the Revain intelligence agent is willing to answer a large number of questions..."

The questions were numerous and demanding. How many planets did the Nerne occupy? What was their rate of reproduction? What was the production of war material? How manufactured? Presumed fleet strength? Reserves? Manufacturing space? Number of transmitters? Imported manufacturing setup?

It went on for an hour and Reener only knew the answers to about a quarter of the questions. He sent a coded message and after a three hour wait received the answers to another quarter.

After ten minutes, Ford said, "Data provided deemed sufficient for general if not precise strategy. In the interests of security I am transmitting printed solution as the tapping of a matter-transmitter is an impossibility."

Less than two seconds later, a folded sheet of paper dropped into one of the reception trays.

Randall picked it up with slightly unsteady hands and read the contents. Then silently and without expression he handed it to Reener.

There was a long silence.

"It could work."

Randall nodded. "Hell of a tall order with their resources."

"I could put it to the war council."

"You could." Randall pulled at his chin, frowning. "People want proof; our people, in my day, would have wanted it."

"How can we offer proof? An operation on that scale can only be proved by action." Reener was a little shrill and reedy.

"Strange, but the answer came as soon as I read it—we could try it out here."

Try it out—" Reener stopped, the idea suddenly gripping him. "A demonstration! The Council might support that, yes." He was suddenly wildly enthusiastic. "If it was proved, proved beyond doubt by the application of this idea—yes, yes." Randall smiled faintly. "We are not really allies yet; should we get down to something?"

Four hours later the agreement was concluded. "I will advise my government immediately. If you will excuse me."

"Certainly." Randall smiled faintly. Now he had to advise his. Was it his or was it a governing body who thought they could exploit him as a period

savage to do the dirty work?

He called Forsythe.

"I hear you destroyed an aircraft; furthermore, the force bubbles completely protect us. We are safe now! It is truly magnificent."

Randall let him exhaust his superlatives before he answered. "What makes you think you are safe?"

"Why, I explained. Now that we have the force bubbles we cannot be harmed."

"You have a short memory. A vessel traveling below ground can still come up beneath them."

Forsythe paled. "But the minefields—"

"Let's not be naive; the minefields worked because they were new, because the aliens didn't expect them. Today they could not only find them, but detonate the whole bunch before reaching them."

"What are you driving at?"

"I have eight of your men training and eight is not enough. Before the year is out, I want the first eight hundred thousand."

Chapter Ten

FORSYTHE'S FACE PALED. "You are mad!"

"When I have more time I will discuss the point with you. At the moment, I have something more important to discuss than my sanity. The human race is going to fight or it is going to perish miserably and alone."

"You have waved that big stick before. I have had time to think, Randall."

Randall smiled unpleasantly. "It is a bigger and more formidable stick now. This afternoon I signed a pact with the Revain."

Forsythe's mouth fell open. "You signed a pact? For whom?"

"For humanity if it wishes to join in. If not, for myself, my crew and the robots who have sworn allegiance to me."

"Now look! Wait a minute!" Sweat was clearly visible on Forsythe's face. "I don't represent humanity, you know. I do not fully represent this planet and its people. Thanks to you and your methods, my position is already precarious in the extreme." He drew a deep, audible breath. "I can't do anything for you, Randall. I can convey your ultimatum to the Council but that is all."

"You don't have to do anything," said Randall, gently. "All I require is ten minutes of your interplanetary communication time. I am still news, still a period pirate; your big money boys should jump at the chance. Your rating should soar and I don't think that there'll be indifference either on Earth or in the empire, to a man who has been dead for over a thousand years."

Forsythe blinked at him, his expression an odd mixture of admiration and sheer terror.

He licked his lips. "It won't do any good, you know. You won't have a flood of volunteers racing to your base to get their heads punched."

"That's not your worry, is it? Arrange the hookup and leave the rest to me."

Forsythe nodded slowly. "I will come out tomorrow and arrange the details, but I have the unpleasant feeling that something will go wrong. Perhaps I should spend the night in quiet prayer."

The hookup was arranged for the following day. When it came time to speak, Randall found himself strangely calm. The announcer had given him a sugary but accurate buildup and now he was on his own.

"Peoples of Earth and her empire. I am not here to discuss the philosophies of nonaggression. You were not able to fight yourselves, so you brought me in to fight for you. That day is over. I will fight *with* you but I will not fight for you.

"Yesterday I signed a pact with the Revain, not on your behalf but on behalf of those who wish to defend themselves. Today no man need say 'I cannot fight,' because in this small box I am holding are enough drugs to

release the repressions of a thousand men. Yes, the Revain have devised a small pill which will release your repression within twenty minutes."

He paused briefly. "This is not a drug restricted to intended warriors nor those of fighting age. It is a drug for scientists, research workers, thinkers, mathematicians. Warriors cannot fight without weapons and, in the case of a numerically superior enemy, without *better* weapons than those held by his foes. The warrior needs the skilled planning of thinkers, the backing of all the forces of science. The human race must mobilize itself and its entire resources or perish."

He paused briefly. "The human race can perish like this." The attack on the northern city was shown in full detail. "Or the human race can resist. It is up to you."

"Do you expect a response?" Keener was waiting in Randall's office.

"I don't know. It was worth a try."

"If there is a response, I have excellent news for you. My government is prepared to send experts with all the necessary techniques. We can cut your training time to fragments and produce a fully trained soldier in three weeks. Space crews, weapons experts and special maintenance take longer but we can still cut the time in half."

Randall sank wearily into the nearest chair. "Anything else?"

"They support your local demonstration in full. Five hundred specialist combat troops will be arriving within three days to support the operation."

"The Nerne will pour in a hundred times that number. This planet will become a war theater." Randall smiled tiredly. "If the robots' solution is basically sound, that is exactly what we want, but personally I don't relish the idea."

Reener quirked his mouth. "I am not wildly enthusiastic myself."

Randall was awakened early next morning by Forsythe and Relf.

Forsythe was over-friendly and inclined to be unctuous. "An exceedingly forceful speech but, also, unlikely to produce results."

Nonviolence has become part of the culture, a way of life, a tradition, you understand."

"So?"

"We appreciate your position, Captain Randall. The Council proposes the allocation of a further seventy robots to your command, plus fifty percent of all robotic air transport."

"Robotic air transport!"

"Why, yes. In view of the aliens' recent air attacks, it was felt that some form of air defense should be provided. The robots could be instructed in basic air tactics, armed and sent up to meet the alien."

"Really." Randall's mouth and chin looked as if they had been carved from granite. "Am I right in assuming that you propose retaining my services in your defense by bribing me with robots?"

"Really, we had no such—"

"Save your breath. " Randall's voice hardened. "Not only do you insult my intelligence but you question my integrity."

"Your integrity? We fail to see where—"

"Do you really believe I'd fight your damn war to the last robot?" He turned and looked penetratingly at Relf, who refused to meet his eyes.

"You, of all people, Mr. Relf, should know better. They're the only ethical intelligences in your entire culture and you propose sacrificing them in your defense. He leaned forward suddenly. "Gentlemen, I accept your offer but when these robots pass to my command, the terms of this transfer will be made known to them in detail. Furthermore, no transport robot will leave the ground in defense of this planet unless that robot carries a human pilot to operate the robot's weapons. So, unless I get some volunteers, those robots will never fly... Is that quite clear?"

They stared at him, obviously at a complete loss.

"You don't understand, do you? In my day, in the Navy, the risks were shared. The captain, commander or admiral sailed with the fleet; they

didn't stay safely on shore—they went with the men, they—"

He was interrupted by the house-bot. "Excuse me, sir. Fifty men who have just arrived by air wish to see you. They say they wish to volunteer, after treatment, for the armed services, sir."

On the northern continent, Area Commander Folve stared moodily from the narrow slit which served as a window and locked his six fingered hands behind his back. Had there been room he might have paced moodily up and down but since there was none, the thought did not occur to him. He was used to cramped quarters; in fact, after the claustrophobic overcrowding of his parent planet, this office was almost spacious. Here he could move his arms, even turn with moderate quickness; it was one of the very few compensations of promotion.

At intervals of approximately three seconds, Folve blinked. That is to say, a transparent membrane descended from the top of his orange-colored eye to be met, halfway, by a similar membrane rising from the bottom. As the operation, from beginning to end, took five seconds and was involuntary, Folve's eyesight was by human standards severely restricted.

There were, however, compensations. His hearing was frighteningly acute and could, by controlled variations of his hearing organs, be adjusted to immediacy or a considerable distance. Nerne specialists could, and often did, pinpoint and identify small insects in long grass by the normal use of their hearing faculties.

Folve removed a small blue pill from a receptacle and began to chew it slowly. As he had two jaws, operating at right angles to the normal human mouth, the operation made an unpleasant grating noise.

The pill itself served much the same purpose as human tobacco except that it included high tranquilization properties. Folve needed those properties: his lot was not a happy one. High Command was ruthless, demanding, petty, and vacillating. It demanded that its officers conduct their affairs according to procedure but blamed the officer if procedure was insufficient for the situation. It applauded initiative if initiative produced results but condemned the offending officer for not adhering to procedure if it didn't. There were no second chances, no hope of redemption. One failure meant not demotion but deletion. Life was not cheap; it was less than worthless.

Folve was ironically aware that those in higher command, above the powers of the deletion courts, could receive a reprimand from the military for a defeat and a citation from Board of Expansion for the same operation. The military dealt with success and the Board of Expansion with living space. Only when one acquired living space by armed conquest did one gain citations from both authorities.

Folve was far from happy. Revain combat patrols were active in the immediate area and he had nothing comparable to send up to meet them. Their presence assured a safe passage for vessels now pouring in from all parts of the human empire.

Folve, despite his anxieties, had a singularly keen intelligence and had unaccountably missed his vocation—he would have made an outstanding politician.

On appointment, Folve had spent the first few days checking not the military situation but the errors of his two deleted predecessors. Both had requested courses of action, both had made suggestions, both had acted within the scope of command.

He, Folve, had only acted on orders and attained an unprecedented reaction by skillful exploitation of sensitive departments.

He notified Headquarters of Revain experts without comment. When he lost his first ship on a force bubble, however, he told Technology. Understandably, Technology immediately sent experts before Headquarters started asking questions. His masterstroke, however, was a brief message to the Department of Psychology.

Intelligence reports lead me to suppose that the human race have found means of releasing their aggressive instincts and must therefore no longer be deemed defenseless. Long-range observation devices show the erection of new cities and large numbers of species engaged in training exercises. Large numbers of vessels arrive daily, presumably containing both recruits and equipment.

The expansion of all manufacturing centers is also noted plus a visible and alarming increase in air transport.

Had this message been sent to Headquarters a long period of time would have elapsed, but in the Department of Psychology, it touched off

an explosion.

He had been wise enough to send an identical message to Headquarters but when the explosion came, it took them four days to find it, which placed them in a highly awkward and embarrassing position.

The Department of Psychology had long been uneasy about the human race. When the possibility arose of their empire being included in one of the numerous war theaters, the Department had made a careful study of the species.

The findings of the Department were depressing in the extreme. The human ingenuity rating was approximately one hundred percent higher than any other intelligence in the known universe. They were liable to come up with new ideas, weapons and war techniques in bewildering variety. Worst of all, however, was that under pressure of war and particularly in defeat they would resort to anything, regardless. If there were super weapons, the humans would use them—even if those same weapons meant their own destruction. Expressions such as "go down fighting" seemed part and parcel of a frightening and wholly alien psychology. The humans would—there was no escaping the fact—blast an entire solar system out of existence if it meant winning the war. The Nerne shuddered. All that living space! Madness like that could easily destroy both races. Only when it had been established beyond doubt that the humans were incapable of resistance had the Department given a reluctant blessing to the invasion.

Now, faced with the resurrection of this warrior race, the Department of Psychology turned its big guns on the War Department. There was an immediate reaction: Psychology exercised immense power in the Nerne culture.

Soon, troops, vessels, weapons and equipment were pouring through the matter-transmitters in a flood. Not all of it arrived. Transmission of matter was only one hundred percent assured of arrival intact up to ten thousand miles. It diminished by one percent per twenty thousand miles beyond that distance. As the Nerne were transmitting in terms of light-years, their losses were considerable. More often than not, soldiers, ships and weapons were reassembled in the reception chambers in a gruesome conglomeration of plastic, metal and Nerne flesh.

The species took these losses without comment or concern. They were

getting twenty percent through and the invasion force was growing hourly.

Folve, keeping a careful tally, waited for the inevitable message—it arrived too late to trap him.

Their Lordships demanded to know what steps he had taken to rid the planet of opposition.

Folve was ready for this one and had his message ready:

Your Lordships,

According to regulation 9/4 paragraph 6, an area commander is permitted to control, yet is restricted to, one thousand combat troops only. Since the number of troops on this planet now exceeds eighty-seven thousand, it is now a secondary theater of war and, as such, is subject to the control of a commodore 2nd class for whose arrival I have been patiently waiting.

Your Lordships will appreciate that I could not mount an offensive beyond the scope of my training and qualifications and without contravening the above-quoted regulations.

Folve was not reprimanded or deleted. Such was the peculiar psychology of the Nerne that although his skillful diplomacy was clear to his superiors, he was promoted to a rank beyond the power of deletion courts. A unit with such a high survival mentality was clearly better suited in administration.

Folve had played his diplomatic game and won, unaware that while he played with ingenuity he had been handing the enemy time on a platter. The humans had needed time and Folve had obligingly handed them three solid months of it.

When a commodore second class arrived a week later, he was shocked to discover through his intelligence services that the human species had at least ten thousand trained men under arms with a further eighty thousand in training. There were also at least five hundred battle-hardened Revain veterans to back them up and the output of war equipment appeared to be prodigious.

He was compelled to waste another month in drawing up battle plans

and reorganization. Experts believed they could rend the human force bubbles but special equipment was needed—another month.

On the human-held part of the planet, Randall rubbed his eyes tiredly and said, "Send him in."

The visitor centered and saluted. "Sir!"

Randall recognized the man and smiled inwardly. This same man had once been a character in a cavalier costume until Heston had punched his head. Now, after the none too gentle ministrations of Duggan and skillful tailoring by Revain experts, he had become a man. He looked lean and hard and highly competent.

Randall waved him to a chair. "Sit down, Captain Lendering. What can I do for you?"

Lendering's teeth showed briefly in his handsome brown face. "My dear Captain, with due respect, in the last few months, I have been through a world which to me was like a madhouse. I have marched up and down and to and fro. I have attacked bags of straw with horrible violence, I have riddled moving targets, climbed mountains and dug foxholes. For sundry misdemeanors, I have run in circles holding a rifle above my head or run several miles with a full pack. I have also whitewashed already shining white walls, cleaned already spotless equipment and scrubbed the floor of the officers' mess with a small utensil called a toothbrush. Surely, after all this, it is not too much to expect some small return."

Randall stopped his lips from twitching with an effort. "Such as?"

"Treatment like that is not conducive to good temper. How soon can I take it out on someone—the Nerne, for example?"

This time Randall did laugh. "Off the record and in strict confidence, very soon. The Nerne have a force bubble clapped over the entire northern continent but we propose coming up under it, putting you ashore and letting you do your worst."

"Which is?"

"Knocking out some very vital equipment."

"Sounds interesting. Will there be much opposition?"

"We hope not. Diversions are being arranged elsewhere."

"How do we get back?"

"We, also, have a job to do; we hope to pick you up on the way back."

When he had gone, Randall sighed wearily. A lot of weight, responsibility and planning had been taken off his shoulders, but despite massive help from the Revain, the humans always came to him first. There were also countless conferences, plans to check and reports to tab. He was tired, sick and tired. He was a submarine commander, not a general, admiral and air marshal all rolled into one. Yes, they had an army now, equipped with new and, to him, terrible weapons, human and Revain. The released human scientists had literally plunged into research and were constantly coming up with something new. There was one thing which they'd come up with that they didn't dare use yet, something which had to be held in reserve for the final battle. Until then they'd have to do things the hard way; that special weapon had to be a surprise.

They also had an air force and keels were being laid for the first space battle fleets.

He sighed again, suddenly lonely, and made a gesture. "Try to find Miss Day, please."

When she came in, he said, simply, "I need you—do I have to explain?"

She smiled, her eyes a little misty. "I've been waiting so impatiently for you to say that."

"You knew how I felt about you from the beginning, didn't you?"

"I know how I felt about you."

"Bless you." He smiled twistedly. "I was going to try to justify myself to you but I don't have to, do I?"

"No, not if you wonder if I understand. You are a gentle man, doing your job to the best of your ability. You hate war but you can't see any other solution."

"Thank you. You understand me better than I understand myself. I couldn't have expressed it so simply—darling."

Hours later, strangely at peace, he was going through the final plans with a group of Revain experts and a large number of newly created and very green human officers who until a few months ago had been wholly incapable of lifting a finger in their own defense. Yes, green, but hard and intent as if the pent-up aggressions of many generations had suddenly flowed into them. The Nerne were going to get a large number of very unpleasant shocks.

The thought sobered Randall. If this attack failed, the Nerne would wipe the entire planet clean of resistance in a matter of days. The aliens outnumbered Randall's forces by the frightening odds of approximately four hundred to one. The entire northern continent was packed with the bumblebee troops. Reconnaissance pictures showed piles of stores and equipment as high as five story buildings and long lines of vehicles and peculiar objects which the Revain had identified as assault projectors.

Randall hoped to God they beat the Nerne High Command to the punch and hit him hard before he hit first.

Chapter Eleven

THE NERNE ALARMS would have been almost inaudible to human ears but to the aliens they filled the entire continent with shrill piping sounds.

The Nerne Commodore, who slept in a cocoon-like hammock hanging from the ceiling of his office, awoke instantly.

He disentangled himself with some effort and studied the immediate report screens.

He saw at once that an unprecedented and unexpected number of aircraft were rising in droves from the southern continent.

At first he was alarmed, but an appraisal of events soon calmed him. They had the force bubble; no known force could break through that. On the other hand, it was disconcerting that a numerically inferior species had seen fit to launch an attack on the eve of his own. Perhaps it was all to the good: these creatures would beat themselves to death trying to get at

him and would be in no position to defend themselves when he launched his own attack.

He increased magnification; yes, a moderately strong force, strengthened, he noticed, by several familiar Revain needle ships.

It would be a battle of attrition, of course. The enemy would be unable to penetrate the force bubble and he, for his part, would be unable to hit back without first lowering the screen which protected him. No sane officer would take a risk like that; he must observe and see how events developed.

They developed much as he had expected but not happily. The enemy circled at a discreet distance and fired at fixed periods. The Commodore was unsure what they fired, missiles or energy discharges, but it was singularly disturbing. Although the discharges in no way threatened to penetrate the screen or alter its structure, they undoubtedly affected it. At point of impact, there was always a livid flash and a shower of sparks. Worse still, there was an immediate and unpleasant twanging sound which after a time painfully affected the hearing organs.

Soon the entire continent was flickering to continuous lightnings and reverberating with noise.

The Commodore took it stoically. It was exceedingly disturbing and unpleasant but not unbearable; what else could they do?

Fortunately, there was no one there to tell the Commodore. At least, not until it was too late.

He was not to know that, miles away, the *Euphrates* was creeping under the bubble, packed with a small but highly skilled assault force.

It was a new *Euphrates*, similar only in outline. Both robot and Revain specialists had cooperated into making it a vessel which was dangerous even to the Nerne. The submarine could now crash-dive horizontally; she bristled with gimmicks and her armor could stand, for limited periods, anything the Nerne could throw at her. Her heavy machine guns remained, but in the place of the forward gun was a slender weapon born of combined human and Revain brains.

The heavy torpedo tubes had gone, to be replaced by thirty forward and

sixteen stern riflings. These fired thumb-sized missiles with ten times the range and twenty times the explosive force of the ancient warheads.

The submarine surfaced close to the tall bronze cliffs at dusk in the glaring lightnings of the continuing attack.

Dugout canoes were swung out and ten heavily armored men boarded them.

Lendering, the ex-cavalier character, raised a cocky thumb. "Luck, Randall."

"Good luck to you and good hunting." Randall turned. "Stand by to dive. Dive!"

There was no need for Randall to hurl himself below. On the word *dive* a section of the plating beneath his feet dropped like an elevator and a watertight hatch clamped shut above his head.

Randall saw its merits but had yet to get used to it. The sudden drop was disconcerting and always left him breathless.

"Half ahead together. Steer green nine."

"Green nine it is, sir. "

At a depth of a hundred and twenty feet and at a steady forty-five knots, the *Euphrates* followed the coastline northward.

Lendering was in a canoe making for the coast. They called it a canoe but no one paddled, the vessel being fitted with an undetectable energy motor which carried the vessel forward at a steady six knots.

A mile away was a flat sandy beach which Lendering knew intimately. The beach circled a wide bay and was sheltered on either side by the towering bronze-colored cliffs.

Only a short time ago, it seemed, before the aliens had come blundering in, it had been proposed that the site be used as a pleasure resort. A long tunnel had already been dug from far inland to the shore but the aliens had arrived before the resort had been started.

Lendering knew about the tunnel and he knew where it came out—on a

high plateau already partially prepared as a flier park. A gravity-slide would have taken the intending vacationers down to the beach and the resort.

Lendering was praying that the aliens had not discovered it and that he could reach the plateau undetected. The continuous twanging noise of the air attack would be of great help. It was deliberately designed to numb the acute hearing of the enemy.

The canoe grated slightly as it reached the beach. He switched off the motor and sprang out, thigh-deep in cold green water.

"Pull her ashore, and quiet up there. Easy with that Parkinson."

My God, he thought, suddenly, I do this as if I were born to it. I'm a damn pirate like Randall, and what is worse, I like it. There's a challenge, a kind of kick, I don't know—hell, why try to justify it?

Aloud, he said, "Scouts ahead—other ranks single file, dispersed. March!"

Before he had taken two paces, the scouts had faded into the blackness. They were good, those three boys—you could rely on them. It was funny to think that Corby had once been shrill, petulant, verbally malicious and had drifted around in a toga. Moylard, too, trying to walk bowlegged and forever spinning his ridiculous six-guns. One could understand why now: psychological imbalance, the unconscious mind trying to compensate for that which it knew was lacking.

How had they been so *blind*? Nonaggression, love of peace, could never be imposed from without or contrived by manipulation. Like every other virtue it had to be enforced from within, by character, self-control and force of will. The human race had tried to run away from itself by imposing nonexistent virtues on its person by genetic sorcery.

Corby appeared suddenly at his elbow. "Path clear, no aliens, no detectors and the tunnel is clear. I checked it personally for quite a distance. It's ankle-deep in dust and sand but the dust is quite smooth and without footprints or marks."

"Good work."

"I hope so. When do we start working the bumblebees over?"

"We don't."

"What!"

"Our main aim is to knock out as many installations as we can without detection and then withdraw."

"You disappoint me."

"Yes?" Lendering's teeth flashed briefly in the darkness. "Give you sixty-five to one we can't knock down ten installations before they come running."

"You're wagering!" Corby's voice sounded vaguely shocked. "You've been infected by the gambling instincts of these primitives."

"Have I? Yes, I suppose I have. I find it rather exhilarating."

"Do you?" Corby thought about it, then he said, "Taken. I say twelve."

"Fine. Quiet now, here's the tunnel."

The boring was seven miles long and exhaustingly steep, since it had been designed for a gravity-slide and not for pedestrians.

By the time they reached the end, they were panting and soaked with sweat. The scouts reported the small plateau clear and they breathed in the cold high air thankfully and with relief.

Here there was no talking. The Parkinson was set up and the men automatically took up positions which covered the approaches. An exact copy of the plateau had been constructed in the training area and the men knew exactly where they were.

Lendering stared down at the land far below. Patches of misty mauve light indicated Nerne cities and concentrations and the entire terrain flickered and danced with minor light sources. The whole damn place was packed with bumblebees; they must be standing on each other's shoulders.

Behind him two heavily breathing soldiers set down a long box. For some reason—he thought one of the sailors—it had been christened the

Pandora. It wasn't a bad name; some of these primitives had a startlingly subtle native wit.

The soldiers knelt by the box and slid back the lid. Things drifted from it silently like ghosts—or was it the devils of the world?—and were soon lost in the darkness.

They were not ghosts or evils; they were minute robotics built of an almost weightless plastic and powered by an in-detectable chemical motor. Smaller than autumn leaves and just as silent, they drifted away but with purpose. On the recognition tapes of each one was a selected target and the robotics had enough directive to land in the most vulnerable section of each one. Some packed a tiny warhead which, considering its size, had startling destructive capacities. Others had incendiary properties, fully capable of gutting a ten story building.

Lendering glanced at his watch and walked over to the Parkinson. The long-barreled weapon was equipped with special sights which turned night into day.

Lendering had no need to sweep with it. His major target was right in front of him, only a bare three miles distant, but appearing much closer. It was higher than the plateau, a bulbous black mass towering a thousand feet into the air and at least a mile in diameter.

Lendering made adjustments to the controls of the Parkinson. That place was going to take some knocking out unless he used his head. *Let's see now. Seven seconds delayed action for the first ten shots, five seconds for the next ten, three for the next and after that what was the primitive word?—ah, yes, bingo!*

He glanced at his watch again: not long now—five minutes.

Far up the coast, Randall said, "Slow surface. "

There were no pumps now and the vessel rose so silently and so slowly that she barely disturbed the surface of the water.

Somewhere a hatch opened silently and a huge cloud of ethereal leaflike things rose upward and began to drift toward the shore.

A mile away an alien city followed the coast for nearly ten miles. It was

built almost to the shoreline and in the mauve light the huge, misshapen buildings seemed to crouch on the sea's edge like hunched and glowering animals.

Men came out of the conning tower of the sub and moved silently toward the forward gun. They knew their target, a huge gasometer-shaped building nearly a mile inland but towering above the rest.

Randall, in the conning tower, was conscious of sweat on his face. Seventy-six seconds to go! The second hand of his watch seemed to literally chatter around the luminous dial, biting away the seconds as it went.

Was the forward gun as good as they had told him? Would it really knock down a building that looked twice as big as a mountain?

Four seconds—three—remember to shout—too late to worry now—two—one—"Fire!"

On the high plateau, the Parkinson made no sound nor flash but it bucked and trembled with each discharge in a land of silent and resentful fury.

The Parkinson did not fire missiles; it discharged huge bolts of silent and, fortunately, invisible condensed energy.

The rate of fire was not spectacular. The Parkinson could discharge twenty bolts at ten a second and then there was an infuriating wait of twelve seconds while it recharged itself.

The first twenty shots, however, suddenly lighted six hundred feet of the vast building in a brilliant and blinding white which almost immediately blew outward and upward in a gush of flame. Five hundred feet of roofing rose several feet in one section, then crashed into the resulting hole.

The next twenty bolts cut the front of the building down to street level and engulfed the rest in a sea of flame.

Lendering pumped in another twenty to make sure before turning his attention to other targets.

Far on the horizon a shaft of flame leaped suddenly toward the stars

and vanished. Lendering smiled to himself. Looked like Randall had hit something good on the coastline.

He was aware as he fired of consternation below. Ten thousand extra mauve lights seemed to have sprung on and a long orderly column was already winding toward the plateau. These damned bumblebees were by no means slow on the uptake.

"Aircraft!"

There was the sudden thudding of an energy gun and something exploded a bare fifty feet above them and went plunging downward, trailing sparks, beyond his range of vision.

"Pull out." He paused only to fire a brief burst at the column of lights, then he pressed the booby switch of the Parkinson. The bumblebees would get a nasty shock when they got around to examining that.

He turned and ran.

As he reached the tunnel, he was aware of what looked like huge black barrels—presumably Nerne aircraft—dropping on the plateau in considerable numbers. Orange-eyed bumblebees literally poured from them. They must have been laid full-length and stacked, one upon another.

The men retreated down the tunnel in good order, strewing pill-mines and the new human-Revain crackers as they went.

Before they had gone a hundred yards, there was a livid flash and a brittle explosion. He caught a glimpse of three bumblebees being flung backward in gruesome pieces; behind them, however, the tunnel was packed with the things.

A cracker started up, bouncing from roof to floor with each detonation and leaving wide gaps in the black, tightly packed ranks.

There was another explosion, larger this time, followed by several smaller ones. A gust of hot air rushed down the tunnel and then a large section of the tunnel collapsed and there was silence.

"Halt!" Lendering was surprised to find himself icy calm and quite without panic. "Mine those walls. If they get through they're going to run

into another cave-in, only bigger and nastier."

Before they had finished, however, there were ominous grating sounds behind them: the Nerne troops were clearing the obstruction fast.

Lendering shrugged mentally. The next one wouldn't be so damned easy; they'd have a hundred yards to bore through, not a mere thirty feet. Hope to God they hadn't found the exit yet.

"Up periscope!" Randall pressed his face to the foam rubber mounting and rose with it.

"Steer green four. Half ahead together." He made another brief sweep. "Close up gun crews—stand by to surface. Load all torpedo tubes."

Randall sighed. The one glimpse through the periscope had been enough. The enemy had arrived at his rendezvous with Lendering before he did. The golden beach was packed with barrel-shaped objects, troops and weapons and numerous shielded mauve lights.

His second sweep with the periscope, however, brought hope. At the northern end of the bay, frequent stabs of flame reflected in the water—the assault force was still fighting.

It was clear that in action Lendering was a clear headed and determined officer. Obviously surprised by the enemy, he and his force had succeeded in fighting their way to a good defensive position. He had followed the beach along the edge of the bay until it narrowed sufficiently for him to hold with his limited force. Now, his right flank protected by the ocean and his left by the huge overhanging cliffs, he was giving a good account of himself. He and his men were well but shallowly dug in and it was clear that the Nerne could not get close enough to dislodge him.

There was ample evidence that they had tried with horrible disregard for losses. In some places the black bodies were piled ten deep and barrel-shaped objects half submerged near the shore suggested they had been no luckier with an airborne assault.

Randall touched a button. "Now hear this—now hear this. Captain speaking. Our commando unit is trapped at the edge of the bay. We can't leave them there, so we are going to try to pull them out.

"On surfacing, therefore, gun crews must gain their positions with all possible silence. Number one crew with the Orlikon will cover the cliff top. Numbers one and two machine guns will guard against air attack; number three gun will cover the beach as will the forward gun. All spare crew will draw automatic weapons from the armory to provide supporting fire when required.

"I also need a volunteer, a good swimmer. Someone will have to swim ashore with a lifeline. Thank you, that is all."

Heston appeared immediately. He grinned almost impudently. "Reporting to Captain for sea bath, sir."

Randall tried not to grin back and failed. There was something almost engaging about Heston lately; perhaps it was his new wife.

"Very well, Heston, thank you. Report to Chief Petty Officer Duggan immediately."

He turned and called the radio room. "Rendezvous link." He picked up the mike. "This is Neptune calling Titan. Come in, Titan."

"Thank God," said a husky but enormously relieved voice. Then, "Sorry. Titan receiving you—over."

Randall gave him a brief outline of the proposed plan and concluded, "Your men will have to make a break for it under our covering fire. They'll have to swim but a sailor has volunteered to swim in with a lifeline. I suggest you start stripping down to bare essentials now."

"Don't worry, Neptune—we're already kicking our boots off!"

The *Euphrates* surfaced unnoticed and the gun crews gained their positions without incident.

"Fire!"

Randall had no time to see if the enemy reacted. The beach seemed to dissolve in a series of continual flashes and rending explosions. He was only half aware that not only were the guns traversing skillfully but at least six automatic side arms were adding their weight as well.

Soon the entire beach was swirling with smoke that the explosions lit luridly with continual flickering. Once one of the barrel craft rose above the smoke, was hit twice and was lost again.

The noise seemed to numb Randall. He was suddenly aware of nearly naked men being hauled aboard, of Heston and Lendering pumping each other's hands on the slippery deck.

He supposed he gave an order, for everyone was racing for the hatches and he himself dropped and heard the hatch slam shut above him.

Suddenly he seemed to come to life.

"Full ahead together. Stand by to dive-dive!"

The submarine went down almost vertically, gaining forward speed as she went

Behind her there was an explosion, then another, shaking her.

"Stand by torpedo tubes... stern tubes, one to six—fire!"

Randall did not know if there was a Nerne weapon on the beach but the explosion of six torpedoes might prove a big enough diversion to enable him to get clear.

"In boost!"

As the ship leaped forward, there was another splintering land of detonation. Their vessel lurched and rolled sideways.

Then, in the distance, there was a huge rumbling explosion, followed, seconds later, by a heavy shock wave.

Randall grinned wryly. If the Nerne weapon had been operating from the beach, it wasn't any more.

Chapter Twelve

THE NERNE COMMODORE brushed aside the loss of three hundred of his trained troops with the contempt it deserved, a drop in the ocean, likewise sixteen flying machines.

What did worry him, however, was the complete destruction of his two transmitter buildings. Both were beyond repair. That had been bad enough but when, well after the attack, there had been a further series of explosions, he became alarmed.

Experts had deduced the introduction of a large number of self-seeking missiles or robotics but that information was no good to him now.

The devices had destroyed all his repair and maintenance buildings and all his servicing spares. In the event of trouble, he could neither reservice nor replace and, due to the destruction of the transmitter building, he couldn't funnel in the deficiencies. Two veritable mountains of stores had gone up in smoke and supplies would have to be strictly rationed. Hasty calculations brought the dismal news that he had sufficient food to feed his troops for eleven days if he wished to maintain their battle efficiency.

The Commodore decided sadly that their Lordships would regard this campaign with a singular lack of enthusiasm. In order to maintain him and rebuild his transmitters, the fleet would have to ferry equipment to him. In view of the local air space superiority of the enemy, however, the supply ships would need a heavy escort or he would be unable to lower his screen to receive the supplies. This damn little planet had developed suddenly into a major war theater. The supply ships emerged from hyper-drive two days later with an escort of four heavy war vessels. They were immediately engaged by ten Revain vessels and one human. The supplies never reached him.

The next day he received two messages. The first was from their Lordships, who deplored his predicament but regretted that owing to increased Revain pressure in the immediate major war theater, a force sufficient to insure the safe arrival of supplies could not at the moment be spared. The second was from enemy sources and said, directly and rather insultingly in grammatically correct but stilted Nerne, "Our intelligence services have made a thorough appraisal of your situation and suggest your immediate and unconditional surrender."

Surrender! The mere suggestion shocked the Commodore deeply. No Nerne officer had ever surrendered. Why, apart from tradition, the punishment would be beyond imagination and as for his spawn—they would deny his right to continuation; they would delete his imprint from the species of Nerne. They would trace every sperm, raise it to maturity, then publicly delete each one as an example and a warning to the entire

species.

The Commodore was not, however, without intelligence. He thought of the alternatives and they were not pleasant. Item: He could remain where he was, as he was, in safety. After eleven days, however, he would have to order the deletion of a large number of his troops to provide food for the rest. That was almost as bad as surrender.

Item: He could lower the screen and launch an attack... or could he? To come to grips with the enemy he must transport nearly a hundred and fifty thousand troops, together with their equipment, across thirty-five miles of ocean. He had no water transport and, now that the workshops had gone, no means of construction.

He could mount an air attack, but with the enemy's local superiority, it was doomed before it began. A conservative estimate put the figure at five to one against and the Revain had several large ships in orbit. One dare not think what they might let loose upon him, once he lowered the bubble to release his numerically inferior force.

Time, too, was definitely allied against him. It was estimated that the remaining twenty-four human worlds, with their specialized robotic construction methods, would soon be launching one ship a week per planet.

His thoughts drifted away from his own problem to the larger one of interstellar conflict. Centuries ago his own species had evolved a technique of stellar conquest which was well suited to their prodigious powers of reproduction: send in a ship, establish a base and hold it against attack for long enough to get the matter-transmitters in operation. After that it was simple: pour in troops and weapons powerful enough to hold off a space-borne attack. Once you had done that, the planet was yours and troops could keep pouring in until it was literally flooded.

Understandably, the Revain, with their vastly slower reproductive capacities and limited numbers, could not match this technique. They could not afford the eighty percent casualty rate of interstellar matter-transmission so they had stuck stubbornly to their growing space fleet. The Nerne had only constructed to keep ahead, not to gain a vast lead in ships, but now, with the humans adding their weight, the Nerne would be compelled to increase their own production. The Commodore felt a twinge of unease. How? Where? They would need at least sixty more

production sites to meet the allied construction threat and where would they put them? With every vacant space filled with vats, just how and where would they do it? There was no room in orbit; his home worlds had already lost sixty-five percent of their light from the vast conglomeration of orbiting repair shops, construction vessels and factories.

His thoughts returned to his own position with some bitterness. These human worlds, all twenty-five of them, could have been taken and occupied in a matter of days with the flooding technique. Unfortunately, at that time the humans had been incapable of defending themselves and his own species had tried to take over the easy way with a limited operation. Thanks to that he was trapped here—trapped with a vastly superior number of trained troops which he was unable to deploy.

Surrender! Surrender? Unthinkable!

Within a matter of hours, however, it became thinkable. The enemy attacked with a new weapon which, unfortunately, the Commodore failed to recognize as a weapon until it was too late.

To the humans, it was as old as time, although something of surprise to the Revain. The method, however, was new. The force bubble was resonated to produce sound and the sound, in the Nerne clicking language, was insidious and demoralizing.

We do not have to attack. You will die without our assistance. In a few days all your food will be gone. You will have to eat your own species or perish of starvation. Who will be killed or eaten first? It could be you! Why not surrender? We will not kill you. We have ample food for all of you. Did you know you had been abandoned? Your command will not send relief ships. You are an intelligent species, too intelligent to throw away your lives when you could so easily live.

It went on and on and then...

Randall shook his head slowly. The probes could not show the interior of the Nerne bubble clearly but they showed enough. Here and there fires burned sullenly, there were continuous flashes, long black columns deployed and redeployed, met and intermingled and dispersed leaving the ground strewn with still figures. The alien troops had revolted.

Three days later the bubble vanished and twenty thousand survivors

prostrated themselves before the conqueror.

Randall in his office, called his robot intelligence service. "Tap the main communicator bands of the enemy and see that they receive the following message in their own language: *'From Supreme Allied Command to Their Lordships. Must advise you, all sections of this planet now in our hands. Your troops revolted, overcame resistance and surrendered to our forces without incident. Documentary, photographic and the recorded verbal evidence from surviving officers and fighting units herewith.*

'Suggest you seriously examine your own myth of invincibility and discuss the possibilities of a peaceful solution with all possible speed.' "

Randall passed the message across the desk to his Revain colleague. "You will endorse this?"

"The Revain officer read it and frowned in a puzzled way. "The purpose of this message escapes me. Surely the Nerne should be left in ignorance to conjecture with anxiety the fate of their troops. Perhaps if you will be kind enough to explain—"

Randall smiled faintly. "I am hoping this message will split enemy command wide open, but first try to place yourself in their position. Ask yourself how many departments will see that message before it reaches the top. Consider the alarm, despondency, disbelief and query it will leave in its train.

"Now, most important of all, the implications. In all history your troops have never revolted but here is evidence to prove it *happened*. As for surrender, there were only rumors of individual capitulation, never this revolting mass surrender at divisional strength.

Take the individual reactions now: some will doubt but there is overwhelming evidence to refute that doubt. Nerne troops marching away under guard, eating in prison camps, answering questions under interrogation. Pictures of our troops in their cities. Picture the consternation, questions, theories. Have we—the enemy—some new and dreadful psychological weapon? What is our future policy in the light of this information? Needless to say, with such a raging controversy at top level, future directives will be hesitant and uncertain."

The Revain officer looked at Randall almost with awe. "You are a

subtle, ingenious and rather frightening people. From what source do you draw such creative ideas?"

Randall looked puzzled. "Creative? My God!" He laughed. "I am a submarine commander one thousand years out of my time period and not a particularly imaginative one at that. Looking back, I can't think of a single new idea since I've been here. Every method I have been able to use is an idea, or the adaptation of an idea, in current use in my own time period. Propaganda looks new because my own race had forgotten it and yours had never been called on to use it"

The Revain officer made a peculiar shivering gesture with his small shoulders. "I will endorse this message of course. I cannot fail, after your explanation, to perceive its value as an instrument of psychological warfare. Nonetheless, you are still a frightening race. I can understand fully the concern of the Nerne Department of Psychology when your race became involved. What is it, may I ask with respect, that makes such a highly intelligent and sensitive people so implacable and, if you will pardon the expression, so bloody-minded?"

Randall frowned at him, half amused and half annoyed. "I suppose, basically, we object to being pushed around. We are individualists and like to conduct ourselves in our own chosen and private ways. When war is thrust upon us, it threatens our privacy, security and individuality. Strange as it may sound we fight with such intensity and, as you put it, such bloody-mindedness, in order to get back to peace. Believe me, I, and all my race, *hate* war. We fight so damned hard to get it over and done with because we're basically waging a war against war as well as the enemy."

The Revain looked at him blankly. He did not understand; to him it was a complete contradiction. In time he would grasp it but at the moment he was completely lost.

He asked, "What happens now?"

"In detail I can't say, but in general, we'll carry the war to the enemy."

"In agreement with my command?"

"Naturally."

The Revain officer sighed. "I suppose they know what they are doing but it will be like trying to clear a desert with a small spade. The Nerne hold two hundred and forty-six planets. They outnumber both our races by literally millions to one. By de-freezing their vats, bedding the spawn and bringing it to maturity, they can replace every million we destroy with ten million."

Randall nodded soberly. "I know. It's a question of the Nerne powers of reproduction as opposed to the Revain-human resources of production."

"I do not understand you."

"You will. In two months everyone will."

The next day Randall was invited aboard a Revain ship.

The Revain commander was tiny, agile and almost exquisitely courteous. "My vessel is yours, Captain Randall. Please consider yourself, with my authority, free to visit and inspect any part of it you wish."

Thank you. This is the lead ship?"

"Yes. This, in your period and at sea, would have been called the flagship. I have studied both your race and your particular time period, as you will note."

"Thank you for the implied compliment. This is Lieutenant Cooper, and I hope you have no objection to two robots? I brought them along as observers: Specialist Seamen Austin and Ford of our intelligence services."

The Revain commander acknowledged them politely and in turn. "You are welcome and we owe a great deal to your robots, do we not?" He raised his arm to the level of his shoulder, the Revain equivalent of a salute.

"Permit me the pleasure of conducting you all on a tour of inspection. As you are aware this is a Revain-designed ship but one which was wholly constructed on your own mother planet, Earth. Consequently we have one or two ingenious human modifications and an exactly balanced crew of both our races." To Cooper, the tour was like a visit to one of the capital fighting ships of his own period. There were many similarities: section construction, bulkheads, self-sealing doors, the black unadorned walls of a fighting ship.

When the opportunity presented itself, he asked the Revain commander how the vessel was navigated.

"Computer navigation, Lieutenant. The course and destination are punched onto the ship's computer navigation system."

"Then you fly—er—travel, blind?"

"Not precisely." The commander passed his hand over a section of blank panel which immediately appeared to become transparent.

Cooper was shocked to see masses of startlingly brilliant stars in endless darkness. "We're in space!"

"Of course. We have been in space for some time." He made a motion with his hand and the stars vanished again. "Visual observation is seldom necessary and in supra-light speeds, useless."

Cooper nodded, trying to look intelligent. The soundless-ness, the apparent lack of motion, gave him an uneasy feeling of unreality.

The Revain commander seemed to sense his unease. "Many of our techniques are beyond the capacity of our organic brains and such burdens are placed in the safekeeping of the ship's computers. Let us go into the battle room. He smiled. "Forgive me, you will find this much easier to grasp if you regard the known universe as a vast ocean in which we sail as a vessel, an undersea—yes—a submarine." He beamed at his own simile. "In this ocean are many islands, some held by the Nerne and a few by ourselves."

He paused and made a gesture and one wall became a map. The planets, or islands, marked in red are those occupied by the enemy. As you see, they hold a long, uneven arc stretching from here to here."

The flagship was by no means alone and it was not long before the highly efficient instruments of the aliens registered the fleet's presence. It was like the presence of a huge sea fleet being detected by radar in the center of the Pacific. Messages began to flash back and forth between the various Nerne commands:

"Large enemy fleet, bearing nine-eight-three—"

"Alert! Enemy fleet, bearing-"

"Enemy fleet bearing this sector, support urgently required."

"Regret cannot release vessels this section; eighteen Revain vessels in immediate area. Suggest application sector six-five-"

Nerne intelligence was faced with another problem: the enemy had amassed enough ships for an invasion fleet; was this a hit-and-run or an all-out attempt to retake some of their living space?

Beyond the threatened sector, long lines of troops stood before the matter-transmitters, ready to reinforce any threatened planet.

"Course and speed indicate enemy heading system eighteen, sector three."

On the three habitable planets of system eighteen, the Nerne took routine defensive measures. Target-seeking missiles were boosted into orbit in increasing numbers, ready to leap outward as soon as the presence of enemy vessels triggered their recognition tapes. On mountaintops and other suitable sites repeller weapons and other massive, long-range armaments bared their black snouts in readiness to meet the invader.

Beyond the range of all these weapons, however, something happened on the Revain flagship. A peculiar device protruded from its surface which for long seconds flickered oddly, then the fleet changed course.

For the next three days it traversed the entire length of enemy-held worlds and, at carefully timed intervals, the peculiar device flickered.

"Enemy fleet again changing course—" They went back at supra-light speed but to Randall and Cooper there was no sense of direction, change of course or motion.

Both felt vaguely uneasy. As observers they had nothing to do and the familiar references were gone. There was no sound of water, of vibration or suggestion of an accompanying fleet. As far as they were concerned they might just as well have been standing still in a soundless vacuum.

"Enemy fleet heading system forty-one, sector twenty-two. "

System forty-one consisted of three habitable worlds and four semi-molten planets too close to the parent sun to support life.

The fleet circled the system, just beyond the range of planet-based weapons, and let go with one of the new human devices. It was not really a weapon but it was typical of human ingenuity and thinking—it triggered the recognition devices of the orbiting seeker missiles. These rushed blindly into space after the projected image of enemy ships which had no actual existence.

Chapter Thirteen

RANDALL AND COOPER, now in the battle room, knew what was happening only from the words of their host and the various report screens.

The dusting of minute lights moving from the bottom of the circular screen to the top was the only indication they had of enemy seeker-missiles moving past and away. The distances were completely fantastic. A miss of fifty-three thousand miles was, they thought, barely worth the mentioning.

A shocked enemy let loose with their heavy planet-based weapons more as a deterrent gesture than in the hope of inflicting losses. The opposing fleet was so far out that the various energy discharges, traveling at less than light speed, would take several minutes to reach their targets. In that time, the fleet could move comfortably out of the target area.

The fleet did move and let loose with a reply of their own, a carefully timed avalanche of robotically constructed missiles, most of which were no bigger than the human thumb.

The acutely sensitive instruments of the Nerne perceived their coming and succeeded in accounting for forty percent of them. Force bubbles sprang into existence over cities, vital installations and the inevitable vats, but the missiles were not aimed at these. One by one, and often in twos and threes, the heavy planet-based weapons were knocked out.

The local command was not unduly concerned since, protected by the bubbles, they could easily send for more. It was, of course, regrettable that a hundred and eighty thousand troops had been left outside, together with a large number of technicians and construction people, but these, too,

could be replaced.

The technicians switched on the reception cubicles in the huge gasometer-like buildings and made ready to receive. The disposal chutes were open, ready for the removal of loss. The technicians were not entirely without feeling, merely hardened by experience. The first twenty or thirty loads would be a mess; they always were.

Lights came on, indicating contact with the transmitting beams, and then a piping noise announced the transmission of the first loads.

Transfer was almost instantaneous but this time there was no crackle of reassembly. Instead, smoke crawled out of power boxes and here plastic or metal turned liquid and circuit breakers fused.

Alarms piped, acrid blue smoke swirled down corridors, and emergency extinguishers went into action.

Frantic calls went out. "Reception failure. Halt transmission!"

Transmission was halted but a considerable number of troops and equipment had already been dispatched. Unless repairs could be effected in a very short period, the projected atoms would lose their cohesion and their reassembly would become an impossibility.

At the reception cubicles, Nerne technicians blinked their orange eyes helplessly. Whole circuits, printed and atomically suggested, had been wiped out of existence—repair would take days.

It did not take the experts long to discover that the enemy had found some method of distorting the transmission beams.

By this time, however, leaving four heavy ships in orbit over the planet, the fleet had moved on to the next Nerne stronghold, where the same process was repeated. This time, however, no attempt was made to transmit or receive. The Nerne took refuge in their force bubbles.

The pattern of attack was now alarmingly clear to the Nerne High Command. The enemy were virtually immobilizing their bases one by one—bases which they were unable to reinforce by transmission and, worst of all, expansion bases in the process of development.

It would take the enemy a considerable time, possibly generations, to pin down the Nerne species that way but the threat was there. There was also the immediate threat of their empire being carved up into manageable segments and assailed without hope of reinforcement.

There was only one course of action open to them—to meet the enemy on his own terms in his own element. They made a rapid check and were relieved to find they outnumbered the enemy four to one.

There was, however, no time to waste. The Revain were launching a ship a week and the humans nine.

Orders were given for a counter blow and almost immediately halted. The numerically superior fleet of the Neme was dispersed; getting them assembled into a single fighting unit was going to be a problem... but they had to try.

They tried to lift seven capital vessels out of sector nine, hoping to add weight to a small fleet already hard pressed by Revain attack in sector twelve, but sector twelve had already suffered severe losses. When the seven vessels arrived, they were joined by four battered survivors and found themselves facing a numerically superior enemy. Of the eleven vessels, only four remained.

By the time the Neme succeeded in mounting a counter fleet, their numerical superiority was gone; they had been cut down to the same size as the enemy. There was, with this knowledge, the morale-sapping realization that the human-Revain alliance was now producing two ships per day, to their own one in three days.

"They are coming." The Revain commander pointed to one of the report screens.

Randall saw a host of spots but they were meaningless to him. Space war was not for him: there was no point of reference, there was no action and it was too detached.

Certainly there was tension, the droning reports of positions and courses, of battle stations and fire control. He joined Cooper at one of the exterior vision panels but there was nothing to see, only blackness and the too-bright stars.

There were voices giving range and bearings but for what type of weapons he was unable to say. They had developed beyond him; he had been unable to keep pace with the flood of devices and weapons now pouring from human, Revain and robotic research laboratories.

Only the voices had any real meaning. "Number six fire department—release!"

Tower to Flag. I am holed and losing power—"

Good God! They were actually engaged in battle. He hadn't even realized it.

He crossed to Cooper, who was staring through one of the vision panels into the darkness.

"See anything?"

Cooper, strangely lined around the mouth and forehead, shrugged. "Not a thing. I thought I saw a flash once, but it may have been imagination." He sucked in his breath. "I'm green, Skipper, but at the moment I'd rather be in a normal war with nice comfortable depth charges scaring hell out of me."

Randall nodded slowly. "Fear is relative but personally I am inclined to agree with you."

Beyond the battle room and somewhere out in the connecting corridor there was a crackling noise and a gurgling land of scream which ended in a curious sigh.

The two men looked at each other, then turned and ran in the direction of the sound.

Halfway along the corridor smoke drifted and on the floor were what looked like two bundles of clothing.

Randall strode forward and stopped abruptly. "All right, Cooper, there is nothing we can do. Stay where you are."

"Why, what's the—" Cooper's question trailed away.

What looked like two bundles of clothing had once been men but

whether human or Revain it was impossible to say. The bodies were blackened and horribly shriveled.

The two men walked slowly back to the battle room, each shut in with his own private thoughts.

Randall was aware of a slight nausea and a feeling of shock. He was used to death but not to the implications in this kind of war. He had never conceived of a weapon designed to destroy the acting personnel, not enemy vessels. Something—something invisible—had passed clean through the ship, ignoring bulkheads, motor rooms and vital equipment... Something deliberately designed for the destruction of living flesh and no more. It was, to him, like fighting with a plague.

They returned to the battle room but the commander was no longer aware of their presence. His eyes were fixed on a single screen and he was clearly anxious. On the screen was a tracery of lines, a kind of skeleton of the ship, showing the various levels and compartments. From three of the compartments, in the skeleton outline, red lights flickered ominously.

From concealed speakers, voices spoke continuously.

"Compartment sixteen does not answer, sir. Bulkheads sealed but no air loss—"

"Cannot raise fire-control twenty-seven, bulkhead sealed, vacuum beyond, sir. No response from safety cubicles—"

"Repair crews close up—"

Randall stared at the screen more closely. Five compartments in the great ship were completely knocked out; two of them, from what he had heard, had been holed.

This was a phantom war. He had felt nothing, heard nothing and, but for the bodies in the corridor, would have had no evidence that they were under attack. He had no idea of the disposition of the enemy, how the battle was going nor how long it would continue. For all he knew they could be routed and in headlong retreat at this moment.

Well, they had called him a primitive and it was true. He was like a painted savage going into action with an armored division.

It was odd, when one came to think about it, how much he, the primitive, had been responsible for this battle. It was not so much that he had done things or thought of this and that. He had been a trigger; ideas, not his own but from his time period, had been taken up and exploited by the robots and the Revain to a point beyond imagination.

"They are on the run? Yes, on the run." The Revain commander's eyes seemed almost to glow, then sobered. "Not without loss: twenty-eight vessels wiped from existence, our casualties yet to be assessed."

"And the enemy?" Randall felt curiously numb.

"Forty-three confirmed losses. Now we must pursue and destroy. Sections of the Revain fleet from other theaters are already moving toward the line of retreat to harass and attack."

Randall nodded and something in his mind seemed to click into place and simplify the situation and he saw it suddenly as a sea battle. The great fleet limping back to its base and temporary safety. Some would be untouched, of course, but there would be those which were not: capital ships, down by the bows and perhaps listing to port; cruisers, with wrecked bridges, funnels riddled with splinters, making half speed on one engine and leaving long oil slicks.

As the defeated fleet retired, covered by its surviving capital ships, the victors called up the sharks.

Proceed all possible speed!

The gray wolves of submarines like his own, motor torpedo boats moving out from island bases, long-range and carrier-borne aircraft, smiting the wounded fleet as it ran.

He had a similar experience in his own time period. A heavy cruiser, down by the stern and listing dangerously.

God! Only one destroyer for protection and close enough to—fire one!

Randall shook himself, shivering slightly. In his mind he had been back in time, over a thousand years back. Not that he wanted to return—there was hope here, a future. Back there everything was dead. He thought, with a slight feeling of guilt, that he'd had no regret for the past, all his

compassion and feeling had been for his men. He had barely given a thought to Margaret—Margaret who had wanted social success. "What good are medals to me? I'm still stuck in these same quarters, entertaining the same dreary middle-class officers' wives. You seem to forget your father was a vice-admiral. I imagined, when I married you, I should by now be associating with a class of people better suited to my upbringing."

He sighed inwardly. Poor Margaret, it seemed pathetic and almost poignant now. At the time, however, it had worn him down. He had skipped leaves and volunteered for overseas service just to get away.

His mind turned back to the present and with the sudden explosive feeling inside, he realized that if they'd completely destroyed the enemy fleet, they had virtually won.

It struck him that his mind must be singularly dear but he could see it now. All the arguments, discussions and preparation which had, until this moment, been fragments, scenes and part pictures like a jigsaw puzzle suddenly fell into place.

This was the *robot plan*, a few words on a piece of paper which he had once seen with Keener and only understood in relation to the northern enemy-held continent.

The Nerne had lost the war! They had been beaten, after the assimilation of much data, by the robots. Such a simple plan and one which could have easily been inserted as a chapter heading in a commando textbook: How To STRANGLE A MAN WITH ONE HAND.

It could have been put even more simply: How To MAKE A MAN STRANGLE HIMSELF.

It would be interesting to know if the Nerne knew it yet. Whether, with this defeat, some of them could see the writing on the wall.

The answer to that question was that several of them could but none of them had yet found the courage or the backing to say so. They knew they would be voices crying in the wilderness, that they would be deleted for defeatism, but the seeds were sown.

Elsewhere the defeat was treated as a minor setback. The Nerne still outnumbered the two allied species by eight thousand to one and they

could treble, quadruple that figure at short notice by force-maturity methods.

It was, however, only a few days before the first stirrings of the coming collapse came from two newly acquired planets.

The garrisons, confined to the force bubbles by the close orbital attention of allied ships, were running short of supplies. No supplies could be sent because of enemy transmission interference and in the face of enemy superiority in space the Nerne could not send ships.

The alien high command woke suddenly to the need for ships. Production! They must out-build and out-produce the enemy.

It was then that the writing on the wall became clear to them—where?

The surfaces of the Nerne home planets were like beehives. The buildings climbed almost to the limits of the breathable atmosphere and burrowed far into the ground. They floated on the deepest oceans and extended far beneath. They could, of course, delete several million of their land, tear down the buildings and start construction, but highways, landing fields and space for research would be needed near the construction sites. They could no longer transmit matter even over short distances. An estimate provided by construction experts recommended the deletion of seventy million citizens after which, perhaps, allied ship production could be equaled but not overtaken.

The Department of Reproduction pointed out that with stellar expansion halted the space so gained would by that time be required for vats.

The Nerne faced one another with consternation and growing terror.

They could delete each other but not the vats. The destruction of the spawn, the species' ticket to continuation, was as repugnant and as psychologically impossible for them as a hungry man's devouring his own body.

Space construction? The allies, with their growing fleet superiority, were already making daring hit-and-run raids in the home systems.

In the conquered systems things were far worse. Supplies were running

short, spares becoming exhausted.

Again, thanks to ship superiority, vastly superior forces were being pinned down under the force bubbles by the presence of one or two ships in orbit. In several instances, allied forces had landed small garrisons and laid siege to the force bubbles. Mere handfuls of experts and robots were making the holding of entire continents untenable.

The galling aspect of most of these attacks was that the allies had taken a page out of the Nerne book and were using Mluck ships—not the huge vessels once employed by the species but miniature unmanned and programmed devices of terrifying explosive power.

These, reacting to magnetic force fields or the gravitational pull of any satellite which happened to be adjacent, simply drifted under the bubbles and were almost undetectable. As they were released in considerable numbers conditions soon became chaotic and defense impractical.

Throughout all this, the enemy pounded with skillful subtlety at the brains of the defenders and propaganda was a weapon against which the Nerne had no defense.

"You must surrender or drown in your own spawn. Daily your living space grows less and soon you will suffocate."

The Nerne High Command knew it was true, each unit of the species knew it was true. They saw it happening.

"Soon mass deletions will become necessary."

Mass deletions had already begun.

"You flatter yourselves that you are an intelligent species. What kind of intelligence demands its own self-destruction in order to perpetuate itself. If your species dies who shall care for the spawn? Who shall place it in the maturity beds that your strain may continue?"

"Surrender," said the insidious and never-ending voices. "In your surrender is life, your life. We shall not destroy your species, nor you, nor your vats."

Then, forcefully: "Allied scientists have, by studying captured members

of your species, found a means of controlling your powers of reproduction. We could relieve your species of your constant pressure. Why not live in peace, with room to *spare* as a free and untroubled people? Why not surrender?"

Pertinently and dangerously the voices asked, "Who decides the deletions? Those who wish their strain of spawn to continue? Those who regard themselves as superior or omnipotent? Will you, the units of the species, permit yourselves to be deleted to please the whim of some selfish official intent only on his own survival?"

After six weeks of this sort of thing, the Nerne rank and file did a little deletion of their own. A government office was destroyed and ninety of its staff cut down as they tried to escape.

It was a small thing but it was the beginning of the end.

The Department of Psychology, however, worked until the day of capitulation studying the defeat and its causes. The cause, the trigger unit, was finally reduced to a single symbol.

The Nerne psychiatrists clicked their opposing jaws in frustration. They should have seen it, introduced it into the general graph and deleted it from the beginning... just one trigger unit.

The trigger unit sat comfortably under a blue tree. He had a pipe in his mouth and a glass of beer in his hand. "Let's hope we've fought our last war, Number One."