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Other novels by Robert Moore Williams that have appeared in Ace Books editions include: THE CHAOS FIGHTERS (S-90), CONQUEST OF THE SPACE SEA (D-99), and DOOMSDAY EVE (D-215).

# THE VOID BEYOND and Other Stories

by
ROBERT MOORE WILLIAMS

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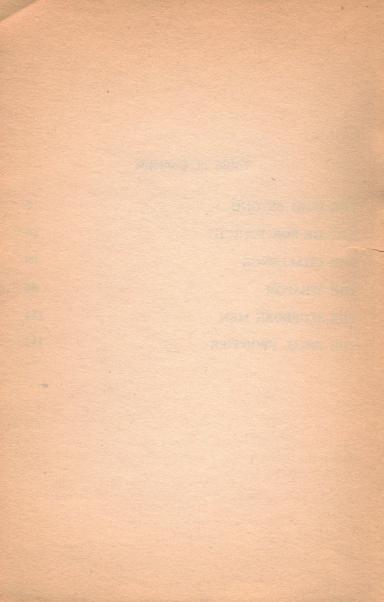
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### THE VOID BEYOND

#### CHAPTER I

## For Men Only

THERE was a meteor swarm out beyond Pluto. Seen through the biggest telescope on Earth, it was only a cloud of dust, no bigger than a man's hand. But astronomers, who had learned something of the possible effect of a cloud of dust in the terrible devastation on Mars in the 23rd century and in the belated recognition of other cosmic encounters in the distant past, were obviously and deeply worried.

Earth Government was worried too. Close investigation was needed to determine the exact direction in which this cloud was moving and its nature. Yes, a ship would be sent. The ship selected for this trip was a commercial job just finishing overhaul in Chicago Spaceport, Captain Eric Gaunt, master, called "Eric the Gaunt" by spacemen everywhere in the solar system, for reasons obvious to anyone who saw him.

The Martian Bounce was loading boxes into the forward hold. The big mate, Joseph Tillingham, who was called "Tilly" by everybody from the master down to the newest cabin boy, was waiting, passenger list in hand, at the midship ramp for the arrival of the passengers.

It wasn't much of a list—there were only four names on it—but it was his duty to check them aboard. He saw the first one arrive, looked, then looked again, then hastily scrutinized the list he held in his hand, his scarred face a picture of unhappiness.

Captain Eric Gaunt was coming up from his final inspection of the engine room, wondering what deficiency of character had made him accept command of this hop, when he saw that the big mate was in trouble. It wasn't really trouble—spacemen have their own private definition for this word, differing remarkably from the definition found acceptable by the lower orders of human life, who keeping their feet on the ground, never have a chance to learn the real meaning of trouble. It was just an argument.

An ordinary argument would not have attracted Eric's attention as spacemen are a breed who get into arguments easily. Then too he had seen this big mate have an argument with five Martians once, the Martians arguing with knives, the mate with his battered fists—and on another occasion, with three Venusians. So he would not have noticed an ordinary argument in which Tilly was involved, not until the number on the other side got up to at least six. But he noticed this one.

Tilly was arguing with a woman, who, Eric gathered, was trying to come aboard. At the sight Eric started to back hastily out of sight. He didn't make it. Tilly saw him.

"Hey, Eric!" the familiar bull bellow came roaring through the ship. The mate came right behind it, breathing fire and thunder, exasperation and indignation. "Eric, this woman, she claims she is scheduled to go with us on this hop." Pain sounded in every throb of Tillie's voice.

"You handle-" So far Eric got when the mate's voice

roared on again, expressing the bill of particulars.

"And she's got a ticket and a passport."

"Those fools in the front office will do anything for a dollar," Eric said bitterly. He expressed the view held by all spacemen, that the front office existed only for the purpose of making more difficult the lives of honest spacemen. "Did you tell her where we are going!"

"She already knew. And they knew. Her ticket says 'beyond

Pluto and back."

"And she still wants to go along?" Eric asked incredulously. He saw that the woman was approaching but he tried hard not to notice her. In the manner of a man passing the buck and glad to do it, the mate shoved certain papers into his captain's hand and fled. Eric Gaunt was left to face the ob-

ject which had scared hell out of a mate who didn't mind arguing with five armed Martians but did mind arguing with one woman.

She was, Eric saw, about twenty-five. Neatly dressed, her face clean without rouge or lipstick, she had the well-scrubbed appearance that was to his liking. Her eyes were violet and under other circumstances . . . He shook his head at this thought of other circumstances. Dreaming was for sane people who kept their feet on the ground. He belonged to space. "You're the captain of this ship?" she said as if something about this fact worried her.

"What's wrong with that?"

The violet eyes regarded him with perplexed awe.

"You're so young."

Under his breath Eric Gaunt swore heartily. Then he said, "All spacemen are young. They take you at sixteen and you spend two years in school. At eighteen you go to space as a cabin boy. Twelve years later you retire. I started as a cabin boy. I'm a captain now. I've got two more years to go."

He put the words bluntly and neither by manner nor tone did he reveal his hidden feelings. Two more years and he would retire on a pension, could settle down and raise a family, could take life easy—and watch younger men blast off into the skies forevermore denied to him. The hard inflexible reasons back of retirement at thirty he did not mention.

"I know about that," this girl said. Her violet eyes showed sympathy. "It's just that I have always thought of spacemen, especially captains in command of a ship, as old men with gray beards—the father complex lying on the unconscious level—and it's a shock to me to meet one and see that he is a young man."

"Well-" He didn't know what to make of this, he didn't know whether or not he liked it. "What can I do for you,

Miss-"

"Frances Marion. The mate"-her eyes sought the direction

in which the perplexed first officer had fled—"seemed to feel something was wrong with my papers. You have them there."

"So I do." He realized now that Tillie had given him the papers in question. He began to examine them, to give himself time to think if for no other reason. The passport was in order. There was a letter of credit for \$20,000, good anywhere in the Solar System. There was a letter stating that Miss Frances Marion was an employee of the Trans-World Telecast System, on special assignment to take motion pictures of the solar system and the universe as seen from beyond Pluto, also the dust cloud there, for telebroadcasting. It requested all interested parties to give her every possible assistance.

Reading this letter you got the impression that Trans-World Telecast would be your slave forever if you helped this employee and that if you didn't help her you would never get your picture on a telescreen. In the letter you could almost hear the thunder of saluting cannons announcing the arrival of royalty.

All of which impressed Eric the Gaunt not at all. As a space captain, he was so much top royalty himself that he

didn't need to mention the subject.

The ticket was next. It was plainly made out to Franc-i-s Marion, which maybe gave the front office an out and maybe did not.

"Your name is misspelled on the ticket."

"Is that important?"

"The spelling can be corrected but unfortunately—or perhaps fortunately, depending on the viewpoint"—he let his eyes rove up and down her trim figure as he spoke—"what it represents cannot be corrected. Did the front office know you were a woman—that is, did you apply for this ticket in person?"

"As a matter of fact I did not. Does the fact that I am a woman make a difference?"

"It does. We don't sell tickets to women. And on this

hop, when we're going out beyond Pluto, we especially don't sell tickets to ladies."

"But I know this ship is on special charter to go beyond Pluto. That's why I want to go."

"Do you mean to tell me that you did not know that women are not allowed to fly in space ships?"

"Who doesn't allow them?" Rage flared in the violet eyes.

"Show me the law or the regulation-"

"There is no law, no regulation." He groaned and shook his head, mentally cursing all Sunday supplement writers. They talked of space-flight in glowing terms, they presented space-flight as the great adventure of the human soul, which it was. The trouble with space-flight did not lie in the human soul, it lay in another organ, the human stomach.

The human mind might be able to solve the intricate engineering and scientific problems connected with space-flight but the human stomach would have no truck with such nonsense. No gravity, no digestion, seemed to be the stomach's motto. Keep your feet on the ground, bub, if you want to live in peace with me.

A queer, a cantankerous, perhaps an evil breed of men manned the space ships. But they were *men*. The big sign was written in neon letters a mile high in the sky.

#### FOR MEN ONLY

The sign meant exactly what it said. Men who went to space made a pact with the Devil. In effect they agreed to cut their throats. Or they might as well have cut their

throats, they had such little use for them.

The stomach, evolved under conditions that included the strong pull of gravity, simply revolted when the zone of no-gravity was reached. With weightlessness came nausea. It wasn't simple nausea like a little stomach-ache, it was a bitter binding groaning never-ending ache, a sickness that refused all food except a few concentrates and a special vitamin pill. Men who met space-nausea—and all who went

to space met it-regarded an attack of ptomaine poison as only a minor irritation.

If the stomach refused ordinary food it also would have nothing to do with water. To make water acceptable, and then only a few drops at a time, it had to be heavily treated with chemicals. And its taste was such that generations of spacemen had agreed that it was made of a mixture of sulphur, epsom salts and drainings from the bottoms of the stables of hell.

Space-nausea was the reason men were signed up as potential spacemen at the age of sixteen, the reason they went to space at eighteen. Youthful bodies were better equipped to withstand the effects of this sickness. At thirty they were all used up and were retired to live out their lives in little houses clustered around the spaceports, where they grew old in peace—and watched the ships manned by younger men blast off into the sky.

So much was true of spacemen. As for spacewomen, there weren't any. If the stomach of the male revolted when it hit the no-grav zone the stomach of the female went stark raving crazy. There was some difference in secretion between male and female stomachs or between the secretion of organs affecting the stomach, some subtle distinction that no biochemist had as yet analyzed, which made it almost impossible for women to cross space. Whole laboratories full of medicos and biochemists and biotechnicians had tried to solve this problem without any luck.

It was the biggest problem slowing the proper development of new frontiers. Men needed women, their ancient helpmeet who has come with them along all the paths their feet have trod. Earth-path, sea-path, sky-path, star-path. They needed women on Mars and Venus, not only because they were a biological necessity but because of a spiritual hunger for

their presence.

When the first cave man looked out at the stars in the sky and wondered what those bright lights were, a woman stood right behind him, wondering too. And probably urging him to go find out. When men first crossed the oceans of Earth, opening new continents, their women had gone with them.

But they weren't going with them to the planets. Man's

ancient helpmeet was Earthbound.

Women had tried. They had learned to hold their noses and drink space-water and live on vitamins. Three women had actually got through to Venus in badly emaciated condition. One had reached Mars. She ruled there as a virtual queen among spacemen.

The women of earth knew all this or should have known it. But apparently Miss Frances Marion was an exception. Eric Gaunt shook his head, wondering whether she didn't

know or whether she was just stubborn.

"But I know all about space-sickness!" Her words were hard little bullets of sound, striving to penetrate his understanding and possibly his sympathy. "I'm willing to face that. I'm not afraid."

"How do you know about it?"

"Why—" It was a question she apparently had not been expecting and for which she had to find a hasty answer. "I—I've read the books. I know what it's like. I—"

"You've read the books!" If there was mockery in his voice it was not intended as such. All he was expressing was the sure knowledge which he had and which she didn't have of the real meaning of space-sickness. Reading all the books on Earth would never give anybody an adequate understanding of this ailment.

"You can learn a lot from books!" She heard the mockery in his voice and responded to it with active hostility—or perhaps she was only trying to forestall what she knew he

was going to say.

"I don't doubt that. I plan to read a lot of them, beginning a couple of years from now. The point is—" His voice was gentle. He saw the longing on her face, understood her desire to go into space. He was being as kind as he could, as pleasant, and he was trying hard to let her down easily. She flared words at him. "What is the point? Are you trying

to tell me I can't go on this trip?"

"I'm telling you exactly that." He watched her face change. She had set her heart on making this trip.

"But you've got to take me. I've got a ticket."

"The company will refund your money."

"I don't want my money, I want passage. You have no authority to refuse to honor my ticket."

She was about forty miles off base here but she didn't

know it.

"I'm sorry," he repeated.

"Why won't you take me?" Anger showed in the tone of

her voice. "You've got to take me, you've-"

He had tried to be nice, now he was blunt. "Because your little tummy won't stand the trip. Miss, we're going beyond Pluto—can't you understand?" To him, the words carried real meaning but they didn't seem to carry the same meaning to her.

"What about your little tummy?"
"It won't stand the trip either."

"Then what do you do when it fails to stand the trip?"

"I sweat it out." Considering the real effect of spacenausea, this was as tremendous an understatement as a spaceman could make.

"Then I'll sweat it out too. My equipment and luggage are already aboard. Have someone show me to my cabin,

Captain Gaunt."

Anyhow she had courage. Eric the Gaunt respected that. But he respected space-sickness even more. Also, she was giving him his orders. She ought to know better. This was his ship, he was captain, he gave the orders. Very gently he took her elbow.

"Keep your hands off of me!" She guessed what he was going to do. His face stung as her palm hit it. He laughed as you would laugh at an errant child. "Will you go without trouble or—"

"I won't go at all."

Eric the Gaunt was a patient man but this went beyond the limits of his patience. He could have called a mate or a crewman but he did the job himself. He swept her up in his arms, ignoring kicking knees and scratching fingers, carried her to the loading ramp, set her down and gave her back her papers. He would have tipped his hat to her but she had already knocked it off.

She stood there for perhaps two minutes an angry defiant bitter little figure, trying to make up her mind whether to cry or to explode. Then she ran down the ramp and toward the administration building. Eric watched her leave.

Tilly gave him back his cap. "She wanted to go with us

on this hop?"

Eric fixed him with a cold and merciless eye. "Yellow," he said.

The big mate grinned easily. "Heck, Eric, you do jobs like that better than I do. Did she actually want to go with us?" Eric nodded.

"Well, all I can say is the world is full of fools," the mate answered.

"That is hardly an original discovery," Eric answered. Looking down he saw a taxi arrive beyond the gate, saw three men emerge from it and look toward the ship. Their passengers, he did not doubt, the astronomers who were going beyond Pluto to observe a dust cloud.

"Here come three more now."

#### CHAPTER II

### Deviation

One astronomer was tall and skinny, one was short and one was in between. Unruh was the tall one, Paul the short one and the middle-sized one was named Wellman. Eric shook hands with them. Although they were within a year

of his own age, he regarded them as kids. But he treated them politely.

"Gentlemen, have you ever been in space?"

"No, we haven't," Wellman answered. The passenger list showed this kid as a Ph.D. and Eric wondered whether he ought to call him Dr. Wellman, decided against it.

Wellman grinned. "I understand it's rather on the rough side. We were selected with the idea in mind that we are young enough to make the trip. We'll try not to make too

much trouble."

"When do we blast off?" Unruh interrupted. There was an air of eagerness about the tall astronomer. His eyes roved continuously about the ship and the expression in them was that of a man whose fondest dream is finally coming true. Eric Gaunt regarded him thoughtfully, not liking this eagerness.

"In a hurry to get away?" Eric spoke.

"Well—when I was a kid I wanted to be a spaceman. But my folks wouldn't let me. Now I have the chance which they denied me." The words poured from his lips and his eyes glinted with anger, directed apparently at his parents. Wellman shuffled his feet apologetically. "If you will show us to our quarters, captain . . ."

"Sure," Eric said. It was not his business. They were within the age limits, they were male, they had been selected for this trip, they were old enough to know what they were going up against. A bustling fat-hipped cabin boy, on his

first trip out, took them away.

Tilly looked after them. "Some people don't know how lucky they are to have folks with good sense," he muttered. "When I wanted to sign articles my old man said to me, 'Well, Joe, experience is a hard school but fools will learn in no other.' At the time I thought he was the fool."

"What do you think now?" Eric questioned.

"I'm surprised at how smart a man my daddy was," the mate answered promptly. His eyes went up to the far-away sky. A shudder ran through his big body. "If you think you are a fool to go to space again you can sign off." Eric spoke sharply. "I take no man with me who doesn't want to go."

"Aw, Eric, I was only kidding. Wherever you fly her, kid, I'll ride her. You know that." The big mate grinned again, an expression that made his scarred face a friendly mask.

"Sure, Tilly." Eric offered a cigarette to the mate, took one himself, lit it in the camaraderie that made formal discipline unnecessary on such ships as this, let the smoke seep into his lungs. From the nose of the ship came the rattle of winches swinging supplies into the forward hold. He listened.

Off in the distance were the towers of Chicago. He looked at them, wondering about the people who lived around them, wondering how they lived and what they did, knowing that never in his life would he quite understand the activities of landsmen.

He belonged to space—he had never lived a normal life—and even when space was through with him, he would still belong to the far-off sky. From where he stood he could see a row of old spacemen lounging along the rail of the spaceport tower, smoking pipes and watching this ship load, dreaming of the days when they had flown in such ships. You could ground a spaceman's body but you could not ground his soul. As his stomach belonged to Earth, so his soul belonged to space.

"Move over, boys, and make room for me," Eric Gaunt thought. He snubbed the half-smoked cigarette in the ashtray with unnecessary violence. The big mate looked at him from sympathetic eyes. The girl came out of the administration building. A fat man was with her.

They had a mild argument with the gateman but both exhibited papers and were passed through.

"Here she comes again," the mate said. "Eric, I'd better

get up and see about that stuff being stowed."

"Yellow," Eric repeated. "Okay, beat it. I'll face her." As the mate retreated he hitched up his pants and prepared himself to meet Miss Frances Marion again.

With every inch of her body bristling defiance of all space-ship captains she came stamping up the ramp.

The fat man, it turned out, was a lawyer she had summoned by phone from the administration building. He car-

ried a thick volume which he opened.

"Captain Gaunt, I should like to read to you the twentyeighth Amendment to the Constitution of Earth Government, which was ratified and passed one year ago by Pakistan. With this ratification a majority of the Federated States have passed this amendment and it has therefore become binding upon all citizens of Earth."

"Read on," Eric said. "Turn loose your artillery, what-

ever it is."

The lawyer took a deep breath. "No discrimination of any nature whatsoever shall exist between citizens of Earth for reasons of sex."

Closing his mouth and the book the lawyer looked expectantly at Eric Gaunt. "I guess that does it, Captain." Apparently he thought he had said something. The girl seemed to think so too. A smile of triumph appeared on her face.

"Please have someone show me to my cabin, Captain,"

she said.

Eric Gaunt said slowly, a little mystified, "This beats me. It really does. Have they actually passed a law like that?" "They most certainly have," the lawyer answered.

"This is the first I have heard of it."

"Ignorance is no excuse. It simply means you cannot deny passage to my client because she is a woman."

"I can't, eh?"

"No, you can't. I admit that to my knowledge this is the first time the question has come up in regard to space-travel but the principle is well established."

"Good," Eric said. "We've been trying to lick space-

sickness for a long time. I'm glad to learn that they have

finally passed a law about it."

"Will power would have solved the problem of spacesickness at any time," the girl interrupted.

"It would?" Even under this provocation Eric Gaunt kept his temper. Probably he would have continued to keep it but the attorney spoke again, laying down the law.

"You will either admit my client to this ship as a passenger or I will slap a World Court injunction on you."

This was too much even for Eric Gaunt. "Then you had

better start slapping," he said.

"What?" the lawyer gasped. Mighty corporations trembled at the threat of a World Court injunction, nations backed down, diplomats got out their striped pants and strove manfully to ease troubled waters in the face of such a threat.

"Before I get out my copy of spaceship regulations and show you a law passed by the World Congress which says that the authority of a space-ship captain shall be final, not only in so far as his crew and cargo are concerned, but also in the matter of passengers. I don't have to take any crewman, any cargo or any passenger I don't want to take, for any reason or for no reason."

For a moment the lawyer's mouth hung open. This was the first time he had ever dealt with a space captain. To him this captain looked like a kid who would be easily overawed. "I am aware—" he began.

"And I don't choose to take a woman on the long hop," Eric continued. "My decision is final and there is no appeal."

"There seems to be some contradiction in regulations," the

lawyer sputtered.

"There is none so far as I am concerned," Eric answered. He turned to the girl. "Please believe me. I am taking this action in your interest. If I took you with me the odds are I would bring back a corpse."

"But I'm willing to take that chance," the girl blazed at him. "You spacemen have hypnotized yourselves into believing that space-sickness is the most terrible thing that can happen to a person. You have set up a mental block which makes it impossible for you to believe anything else. Even if you had a cure offered you on a silver platter your

mental block is so strong that the cure wouldn't work—because you wouldn't believe it could work."

For a long moment he stared at her. Here was courage of a kind he understood and admired. Or was it stupidity? He did not know, had no way to find out. But he knew space-sickness. If he admitted this girl on the strength of her statement that will power could control the nausea he knew existed, the consequences would be upon his own head and he would have to live with them the rest of his life.

All over the Solar System spacemen would speak of Eric the Gaunt, who had taken a woman passenger on the long hop. They would regard him as a fool and, regarding him in this light, they would not sign on with him. It had happened before. Adam Nish, skipper of the old *Belmont*, had taken a woman passenger. Adam had retired at twenty-seven, simply because no spacemen would serve under a captain they regarded as an idiot.

Eric shook his head.

"I'm sorry."

"Then you still won't take me?"

"I cannot take that chance."

Blazing anger shouted at him from the violet eyes. "You are an obstinate pig-headed jackass."

"And so are you," he answered. "The only difference is that I am captain of this ship. I'm responsible for the safety of passengers, crew and cargo and you are not. Good day."

The last he saw of them they were stalking into the spaceport administration building. The lawyer was waving his hands in expostulation and the girl's back was still bristling with indignation.

"She's a right determined young lady," the mate said, re-

appearing.

"She is that," Eric answered musingly. "You know, if you could get a girl like that to love you as hard as she fights you . . ." He paused and tried to frame what he wanted to say next.

The mate said it for him. The bull bellow broke into a

sound that was clearly and distinctly an imitation of a giggle. Eric the Gaunt blushed from his Adam's apple to his hairline.

"You get the hell up and see if those astronomers are strapped in their bunks for blast-off!" he shouted.

"You bet," the mate answered. But as he exited the gurgle-

giggle was still sounding deep in his throat.

"You sound like a bullfrog trying to sing tenor!" Eric shouted after him. But Tilly was gone. For a moment Eric stared after him. Then he relaxed, grinning. He could take kidding. But he did feel sorry for the girl. She had been willing to face space. That fact awed him. But she was talking nonsense when she said spacemen had hypnotized themselves into believing in space sickness. There was more to it than that—a damned sight more.

There was some slight delay in loading the last of the boxes into the forward hold and blast-off was delayed for an hour. Then the steel ports were swung ponderously shut and were sealed air-tight as the tough bubble of steel and plastic was prepared for her trip. Tractors pulled the *Martian* 

Bounce away from the loading ramp.

From the engine room that ran all along the bottom of her scarred hull, to the observation domes in the top of the ship, to the control room in the nose, captain, officers and crew took up their ready positions. Huge tugs lumbered up and hooked on fore and aft with magnetic grapples. With the tugs lifting and her own jets blasting she pushed herself upward. The tugs cast off and she roared away under her own power.

She would be gone nine months. She would reach maximum acceleration in about five days. From then on, except for thrusts from the steering jets necessary to hold her on course, she would coast to her destination. Arriving at the space area beyond Pluto, she would be brought into proper position for the astronomers to study the cloud of meteoric material there.

A cloud of such dust might sweep all life from one of the

planets. It might color the seas and poison them, it might cloud the atmosphere, even change slightly the orbit of a planet. Whether it would do any of these things was problematical but certainly it would disrupt the lives and the stomachs of the crew and passengers of the good ship *Martian Bounce*. As she moved into the no-grav zone the doctor began his regular rounds.

Two days out Tillie reported to his captain on the matter of a nuisance. "That tall skinny astronomer, Unruh, is all over the ship. The chief has thrown him bodily out of the engine room. He tried to talk to a steersman into standing his watch. He's got his nose into everything. What'll we do with him?"

"Let him have fun," Eric answered. "He won't have it long." As he spoke he burped—the first sign of protest from his internal regions.

Ten days later Earth was a silver star, so far away they could hardly tell it from the other stars littering the sky. Not that anybody looked to see. Space nausea was on every man of them, the biting torture of a disordered stomach, the slow ache of beginning tissue hunger.

As the nausea hit him at full force, the griping sickness that turned men into boil-sore hotheads, Eric Gaunt thought again of the glowing phrases the supplement writers used to describe spacemen. Men who dared death, they called them, among other things. As if any man who had ever met space-sickness would ever regard death as a dangerous enemy.

Stubbornness, this was the quality that made spacemen. Men who could look the Devil in the face and spit in his eye.

Yet in spite of the life that spacemen led the ships kept flying. The training schools had to limit their applicants. If this was heroism of a high order, meriting the biggest decoration ever awarded by any government on Earth, spacemen would be the last to admit it. And the last to get it.

Eric the Gaunt was proud to be a spaceman. So was every

other member of the crew. They formed a tight fraternity of the super-elect, the super-fit. They had the ability to get the job done when there wasn't a one of them who wasn't sick to the bottom of his soul. Eric saw the plump cabin boy, his face suddenly turning green, stumble blindly into the head, retch his insides out and come back again to the duty of cleaning up his own mess.

"You'll make a spaceman, kid," the captain said.

The kid's eyes glowed. "Gee, thanks," he muttered from between clinched teeth.

Space flight was a sieve through which a chunk of the human race was being pressed like grapes through a wine press. Out of the alchemy of torture would come a new race, fit to . . . No, the new race would not come. You don't breed up a new race with only one sex. And man's helpmeet was Earthbound.

Eric thought of the girl, Frances Marion. He was glad she wasn't here in this zone of agony—but he was sorry too. Her presence might have made his own discomfort a little more endurable. For uncounted centuries women had helped in this way. But they could help no longer. When he returned to Earth he would try to find her and explain again . . .

The ship's doctor came to see him in his cabin. Wellman was with him. Eric had not seen the doctor of philosophy for several days, presumably the astronomer had been in his bunk. Certainly in this appearance he looked like a man who had been through a bad time. His face was gaunt, he hadn't shaved, his hands were shaky.

"A little rough, eh, Wellman?"

"Damned rough, captain. But we'll make it-that is-"

"We came to speak to you about Unruh," the doctor said. "He is showing signs of intense strain."

"Eh? What kind of strain?"

"Mental."

"I am afraid I have been somewhat remiss in my duty," Wellman said. "But the truth is I have had other things to think about. As you no doubt recall, when he first came aboard, Unruh told you he had wanted to go to spaceschool but parental objection had made it impossible for him to go. The truth is he *did* go to spaceschool but was washed out because of emotional instability."

"I see," Eric said. He remembered he had had doubts about

Unruh. "What's happened?"

"Now that he has been hit hard by spacesickness and his entire body as been thrown out of balance this hidden emotional instability has come to light," the doctor said. "They must have caught this hidden taint in spaceschool and washed him out because of it. Now, we've got him on our hands." The doctor's shrug said that personally he already had his hands full and wanted no part of any nutty landsman.

Unruh, in his cabin, was a gaunt ghost when the three entered. He looked as if he had lost twenty pounds, his frame was skin and bones. His eyes were wild. He struggled to his feet.

"Captain, I've been wanting to see you but this fool has kept me from you." A jerk of his thumb indicated the ship's doctor. "Captain, this ship must be set on a course for the stars. I am destined to be the first man to make star flight."

There was more of it. Eric didn't listen. He had heard it before. They called it space strain. But the delusion that Unruh was destined to make the first star flight was odd. Usually victims of space strain wanted only one thing—to get their feet back on the ground—and demanded that the ship be taken immediately back to a planet.

Outside in the corridor he said to the doctor, "Will he live out the trip?"

The doctor shrugged. "You know as much about that as I do, Eric. We'll feed him by force if necessary."

"What about his mental condition?"

"Sometimes, when they get their feet back on the ground again, they get well. Sometimes they don't."

"What about this delusion that he wants to go to the stars."

No man had ever gone to the stars. The distance was too

great.

"Probably, when he was a kid, he dreamed about flying to the stars," the doctor said. "When he was washed out of spaceschool the dream exploded. Now it has come back, only it isn't a dream any longer—it's a driving compulsion."

"What do you recommend?"

"Sedation, intravenous feeding if necessary, keeping him locked in his cabin. It's not the best treatment but it's all we can give out here."

Eric nodded. It was the only order he needed to give. "Tough," he said to Wellman. "Can you and Paul carry on

your duties without the help of Unruh?"

"We can try," Wellman said, Eric didn't tell this middlesized astronomer that he had the makings of a good spaceman in him but he felt like it. "Sorry about Unruh. If I can

help you in any way please let me know."

A month passed. The Sun was a ball far away. Over on their right Jupiter was looming up like a small sun. They saw Saturn, wearing its rings like a halo against black space. The cloud of dust was still not visible to the naked eye but Wellman and Paul, with special telescopic equipment mounted in the observation dome, were watching it. Unruh, after a period of intravenous feeding, was showing signs of recovery, the doctor thought.

Sickness gripped the ship. Wellman and Paul, to whom this bitter nausea was new, were trying hard to go about their duties. The officers and crew, to whom this sickness was old stuff, were doing their jobs. The new cabin boy had lost all his plumpness—his clothes hung on him like rags on

a scarecrow.

"Haven't they tried to lick this space-sickness?" Wellman

asked one day in Eric's cabin.

"They've tried everything including standing on their heads," Eric answered. "There is hardly a trip when we don't

have some new pill to try. Nothing works."

He broke off as Tilly hastily entered the cabin.

"Eric, damn it-"

At the tone of the mate's voice Eric instantly cocked his ear to the sounds of the ship in an automatic attempt to locate the source of the trouble he saw so heavily written in the scarred face. But the ship was functioning smoothly. His trained ear told him everything was all right.

What then was wrong?

# CHAPTER III

## Stowaway?

"Eric, we've got a stowaway!"

The clang of the radar-actuated bells warning of the approach of a meteor would not have aroused Eric Gaunt so rapidly as did the single word stowaway. Not only because the loading platforms were well guarded but because the reputation of the ships was well known, stowaways simply didn't happen. Nobody but an idiot ever space-hopped. Eric Gaunt came to his feet, "Where is he?"

"In the forward hold. I just caught a glimpse-"

"Come on!"

The mate and the cabin boy dug him out. He had come aboard in a big, packing box and had obviously made this box his sleeping and living quarters. All they could see at first was the end of a leg clad in blue overalls. The mate grabbed this leg. The sound from the box was a startled "Eek!"

"Come out of there!" The mate yanked hard on the leg. The stowaway came sprawling out of the box, face downward, then put out a hand and lifted himself to his feet.

"Holy hell!" the mate breathed.

The stowaway wasn't a he. Clad in dingy blue overalls that had obviously belonged to some dock laborer, the stowaway was Frances Marion.

Her composure was remarkable. Digging in one pocket, she produced a crumpled wad of papers from which she selected one.

"My ticket, Captain."

Eric the Gaunt stood looking at her. Her face was not as clean as it had been when he had first seen her and there were circles under her eyes. Some of the rounded contours were gone from her hips. Knowing what it meant, he would rather have seen anybody else here than this girl.

Any emergency that the ship might meet he could handle. He would lose neither his temper nor his poise nor would any situation upset his finely-balanced judgment. But when

he tried to speak to this girl he choked instead.

"Don't take it so hard, Captain. You look as if you were

seeing a ghost."

"Perhaps I am," he spoke. "Do you know it is too late to turn back?"

"I hope so."

"Do you know you have probably committed suicide?"

"If I have it is my life I am throwing away."

She still had her courage.

"I'm sorry," he said, his voice still choked. "We'll do the best we can for you. As soon as you are settled in a cabin I'll send the doctor along. Perhaps . . ."

"Why do you think I will need a doctor?" she spoke.

The question dazed him. He knew why she would need a doctor, need him as she had never needed one before in all her life. Then he remembered. She had been here a month already. The effect of that month was obvious on her face and on her body but she was still in control of herself and if she was suffering she was keeping it hidden. The Spartan boy who had let a fox gnaw his vitals rather than cry out had not done a better job than she was doing.

"Haven't you had space-sickness?" The words shot from

his lips.

"I guess so." Her answer was indifferent. "I haven't felt so well. But-"

"What have you had to eat and drink?"

"The same food that you and all the others have eaten—concentrates and special vitamins. I've drunk space-water. I took the liberty of opening some of the ship's supplies." She nodded toward the boxes stored in the hold. "I hope you don't mind." Mockery crept into her voice. "But—"

"And you haven't had space-sickness?"

"How would I know what space-sickness is?" she shrugged. "For that matter I told you I wasn't going to have it, that

space-sickness is largely auto-hypnosis."

Eric Gaunt groaned. "I think you're probably so sick you don't know what you're doing but you're just too damned stubborn to admit it." He gestured to the cabin boy. "Take her to cabin nine."

He watched her follow the cabin boy out of the hold.

There was the trace of a smile on her face.

"She's in a state of space-strain and doesn't know," the big mate breathed huskily in his ear.

"Get the doctor," Eric said.

The medico reported to him later in his cabin. The doctor was a harassed man. "I can't tell for sure what her condition is. She's had spacesickness, I'll bet on that, but how light or how heavy it was I don't know. Her heart action is all right, her reflexes are normal. We'll just have to wait and see."

An hour later Eric passed cabin nine. The sound of singing came from inside. He listened a moment, his heart in his mouth. Had space-strain hit her? Was this her reaction to it? He listened. No, the voice was clear, the notes were on key.

# "We'll say goodbye to Mars And blast off to the stars . . ."

It was the oldest, simplest, most moving of all the songs that spacemen sang. They sang it in space school. Rolling dead drunk down the streets of a Martain city they sang this song. The tune was simple—any man could carry it. The words were even simpler—any man could learn them. But the spirit of the song was something that only a spaceman could grasp.

"We'll aim her at the sky
We'll come back by-and-by.
Or maybe never."

A rolling chorus should blast out the words, "Or maybe never!" A hundred voices should sing this song. In it spacemen expressed their defiance of space, of space-sickness, of the vast uncharted depths of space that lay out yonder beyond the Solar System, where the Big Man Ocean began . . .

In this song that spacemen sang the human soul defied the whole universe, saying to the very stars in the fartherest depths of space, "Move over, bud, we're coming your way."

And one girl, singing alone in her cabin, was getting as much defiance into her voice as could a hundred spacemen.

Eric the Gaunt knocked on the door. The song faded into silence. The girl stood there.

"Thanks," he said and fled. If this was space-strain he did not choose to identify it. And he did not know what he was thanking her for except possibly for being alive.

In the days and the weeks that followed the girl became a problem to the captain, the doctor and the crew of the Martian Bounce. The doctor practically forced her to submit to examination every twenty-four hours. After each examination he reported back to his captain.

"Eric, that girl has touches of sickness—but not bad." More and more the doctor was beginning to look like a man refusing to believe the evidence of his own tests.

"Why?" Eric demanded.

"She says the answer is will power," the doctor answered. He pointed to the steel bulkhead of the cabin. "Eric, do you mind if I butt my head against that?" "I don't mind. Just leave a little room for me."

They reached their destination. The ship was not stopped, she was set to move in a great circle that would keep her out of the dust cloud but would still come close enough to it to enable the two astronomers to make their needed observations.

The observations dome now looked out on what spacemen called the Big Man Ocean—Space beyond Pluto . . .

Space-ships had been here before, to take a good soulshocking mind-searing peek at the vastness of deep space itself. Like bugs the human race crawled across the Solar System, like flying midges they hopped from planet to planet.

They got illusions about how important they were, how great were their accomplishments in hopping from island to island around their sun. Then they came up here and looked at the Big Man Ocean. Like puppies who have grown up to be dogs and have gone lion hunting they came up here—and found their lion.

Here the planet-hopping bugs saw how big they were, here the grown dogs saw their lion. Here men got small again, here they saw the vastness of this mighty universe, the stars stretching on and on forever until the mind reeled from the attempt just to count them. Here men, even spacemen, became humble.

It's a mighty big ocean whose icy invisible waves lap Pluto's shores.

In the observation dome, Eric Gaunt stood looking out. If there were any feelings in him they were under tight control. A long, long time before some of his ancestors had stood on the shores of the Atlantic Ocean, as he stood now beyond Pluto, staring at Old Ocean, wondering what lay beyond the gray waste of waters.

They had needed something. They hadn't known exactly what it was but they had gone looking beyond the waters for what they needed. Perhaps they had found a part of what they sought in a land called America but they hadn't found all of it. Something was still missing, something was

still needed. Did it lie out vonder in the stars?

No man knew the answer to that question but all men knew they would go look if they could. He caught a trace of sound, a hummed song.

# "And blast off to the stars . . ."

At the sound of the spacemen's song the feelings under tight control deep within him threatened to erupt. He jerked his head around. There was a time and a place for defiance, a time and a place for being humble. If spacemen defied the universe it was because they knew themselves to be inadequate to cope with him.

The girl stood at his elbow looking out. "Surely it doesn't awe a space-ship captain?" Her voice was brittle, taut, tight.

"You hopeless idiot—" Then he saw her eyes and tried to catch the words. "I'm sorry." There were tears in her eyes. She wasn't needling him, she wasn't defying him, she was scared literally half to death.

It struck him suddenly that the first time he had seen her she had been scared of him, of the mate, of the ship, perhaps of something else. Now she had seen the sight that even spacemen dread and the fear had come out of her in tears which she could no longer control.

"I'm sorry, too, Eric. I didn't mean it the way it sounded."

On her face the tears were plainly visible now.

His arm went out around her and she came to its protection as if it were some long-sought haven, a shelter desperately needed.

Transmitted by the steel hull, from the nose of the ship came the sound of a steering jet changing the ship's course. It was instantly followed by the full-throated roar of a driving rocket from the stern.

In that moment Eric Gaunt forgot this girl and everything else—except one thing. The ship was changing course without orders. Acceleration was being applied, also without orders. As he started for the door that led downward from the

observation dome that door was thrust violently open by the mate, seeking him.

"Eric, that Unruh got out of his cabin and into the control room. He slugged the steersman and he's in the control room now, changing the course and the speed of the ship."

The yaw of the ship was obvious. Eric leaped to the observation dome. It was hard to tell exactly what new course was being applied but it looked as if Unruh, in the control room, were taking the *Martian Bounce* straight out into space.

"Go to the engine room and tell the chief to disconnect fuel lines leading to all steering jets and to the main drive."

"Yes, sir."

The mate was gone.

Eric and the girl followed him down the steps. In the passage leading to the control room in the nose they found the steersman who had been on duty, getting groggily to his feet. A three-inch section of his scalp had been laid open.

The door of the control room was closed. Eric jerked down on the handle. It did not budge. The door was locked on the inside. It was made of steel one-quarter inch thick.

"Cutting torches from the shop," Eric said. All controls were behind that locked door, including communication with the engine room. The crew was already reporting. The doctor was there, passing out pills. Wellman and Paul were there.

"We had just determined that there is no danger to the Solar System from this dust cloud," Wellman said. "It is not on a collision course with our system." He spoke in the tone of a man who has just made an important discovery and is determined to report the fact even though he knows it is no longer of any importance—to him anyhow.

The roar of the driving rockets went into silence. Tilly, his face grimy, came up from below. "The chief says they're cut and he can cut 'em back in when you order it. But he says the lines ought to be cleaned before they're cut back in again because of the danger of fuel leakage. What next, Eric?"

The ship was no longer accelerating. But it was headed out into space and they could do nothing to change its direction

until they got into the control room.

The torches arrived. They cut the hinges out of the door, then the lock. The door went down.

Unruh was in there. He cringed away from them as they

entered, expecting punishment.

"Come along, son," Eric said. His face was gray. There was nausea inside of him that was tying his stomach into knots. The doctor and two crewmen took Unruh away. He went meekly. Here in this control room the psychosis that had driven him had been washed out as a stain is washed out of dirty linen.

Eric the Gaunt stood with his hands on his hips, looking at the control room. Behind him, the mate was cursing,

softly, all the oaths that spacemen knew.

When the fuel was cut off Unruh had apparently gone berserk. With a heavy wrench he had pounded the control panels to broken fragments of shattered plastic, he had beaten the view-radar screen into bits of glass, he had smashed and pounded the heavy tubular chair where the steersman sat. He had even attacked and tried to smash the heavy plastic window that formed an eye-level viewpoint around the nose of the ship.

"That empty-headed son of hell," the mate said.

"Get the electrician." Eric ordered.

As he spoke, the whole vessel vibrated like an immense bell. A pea-sized meteor had struck somewhere and this sound was the result.

"Did you hear that?" the mate said.

"I heard it. Get the electrician." Sickness was in his voice and his stomach felt like an old dishrag tied into a knot and dried in this condition. He moved to the viewport, knowing what he was looking for, knowing that he did not want to see it. The navigator's instruments were there, in position over the log-book stand.

At this short distance he needed less than a minute to determine direction of flight and what was going to happen unless they could prevent it.

#### CHAPTER IV

# Steaks Coming Up

What he did next was strictly an automatic reaction, an act performed without conscious direction while under the effect of strain amounting almost to full shock. Picking up the pen, he wrote in the log:

Control room taken over by insane passenger. All controls are smashed. Astrogation discloses that ship is now on collision course with cloud of meteoric dust which we have been observing . . .

He dated the entry to the hour and the minute and signed his name—Eric Gaunt, Captain—without really noticing what he was doing. He wondered if anywhere, at any time, any man would read the entry he had just written.

The mate entered with the electrician. "Get everybody who can scrape insulation off of two wires and wrap them together on this job."

"Right."

The control room filled up with gaunt angry sweaty men. Eric was a merciless master, riding them with the gentlest voice that ever spoke the English language. They were humping themselves as only well co-ordinated men can move, clearing away the smashed control panels, identifying twisted and broken wires, fitting them to new switches.

Tilly took a quiet look at the log book. "Uh-Eric, he said.

"You know about it, huh?"

"The first meteor was enough warning."

"The first one?"

As if the words were prophecy, again the ship vibrated like a mighty bell. The men working on the smashed panels knew perfectly well what the sound meant. At all times such as this a constant telepathic flow seemed to exist among all members of the crew but they did not look up. They merely worked faster.

"Close all airtight doors," Eric ordered. "Detail every man not urgently needed elsewhere to hull inspection. Put them into space-suits. You take personal charge."

"Right." The mate was gone.

The girl twisted into the control room, went from man to man, handing out something. She came to Eric, offered a small red pill. "Doctor's orders," she said. "He thinks maybe they'll help."

He gulped it down.

The ship had her nose on Antares. Out of the corner of his eyes Eric watched the star. Antares was dimming fast.

The particles of dust and tiny meteors would strip the hull from a spaceship the way a monkey strips a banana.

Bong went the bell again, more heavily this time.

"That one was as big as a marble," Eric thought. A taw, maybe, a shooter that kids use in smooth places on vacant lots.

Tilly came in. "We got a hole in the observation dome. Three feet long and about an inch across, a regular slit. They're patching it now." His eyes went to the men working on the smashed panels but he did not inquire about the progress being made there.

"Have the chief turn the fuel back on," Eric said.

"Okay. But-"

"Just in case we should be able to blow a tube."

"Right."

"And all of us must die because one man went insane?"
The girl spoke.

"Insane men and insane ideas have killed more men than all the wars in history," Eric said. "I don't blame Unruh. He just tried to do what all of us have wanted to but haven't dared attempt. Some day, when we lick our stomachs, we'll jump off into the Big Man Ocean. And we'll be sane men doing it. All he did was try it ahead of time."

The girl watched him in silence. "You are a rather re-

markable person."

He jerked his thumb toward the men who were humping themselves. "If I am remarkable so are they. We're just spacemen. Remember the song—"

Her voice lifted.

"We'll aim her at the sky We'll come back by-and-by . . ."

There were eleven men working in that control room and eleven voices picked up the chorus of that song. Maybe they didn't roar it but they sang it as best they could.

# "AND MAYBE NEVER."

As they sang they worked faster. Eric saw they were working faster. Fatigue and the terrible knotting of their stomachs ought to have been pulling them down but somehow it wasn't.

"Keep on singing," he whispered.

From the floor the electrician wiggled a beckoning finger

at him. He dropped to his knees beside the man.

"Eric, the timers are out of the circuit, but I've got the steering controls jerry-rigged. This button controls the port tubes, this one controls the starboard. But there is no way to time the blast."

"We'll time it by instinct," Eric answered. He picked up the telephone to the engine room. "We're going to blow."

"Right." The gnarled voice of the chief engineer came back at him. "If fuel has leaked into the tubes we'll blow ourselves straight to Kingdom Come. But blow her, boy, blow her."

The chief engineer was a decrepit old relic of a spaceman, all of twenty-nine years old. He regarded every other member of the crew as a paling boy, including the captain. "Blow her, boy, blow her." He repeated the words.

Eric grunted. With no hesitation whatsoever he pressed the button that blew the starboard jet. The chorus roared out.

"And maybe never . . ."

He shook the sound out of his ears. From somewhere almost directly below him came another sound, the roar of a functioning jet. It was a smooth roar, the sweetest sound he had ever heard. He lifted his head, lined up the dimly-visible Antares with the edge of the visionport. Slowly, ever so slowly, the image of the star vanished. The ship was swinging away from collision course in response to the thrust of the steering jet.

He took his finger off the button. The jet went into silence. In the control cabin was another sound—that of men cheering. They were slapping him on the back, slapping each other. The song was rising again.

"We'll aim her at the sky . . ."

It was a blast of sound, expressing defiance of all space, of space-sickness and of the Big Man Ocean, whose icy invisible waves lapped just outside the stout steel hull of the *Martian Bounce*.

An hour later he left the control room. The ship was firmly on a new course. Stern rockets were roaring again. She was going home now, her mission finished. Back to Earth, back to the green planet across the wastes of space.

The girl was in her cabin. She came quickly to the door at his knock.

"I'm hungry," he said.

She stared at him.

"I could eat a beefsteak, I could drink a barrel of water. And I'm not sick." His voice expressed sure knowledge that a miracle had happened far beyond the miracle of the repairs in the control room, greater than the swinging of the ship away from her collision course.

He spoke slowly, measuring the words one by one. "No pill put together by any ship's doctor could make me hungry or could take away the nausea from inside of me."

She still stared at him as if she did not begin to understand the meaning of what he said.

"Who are you?" he said.

"I'm a biochemist."

"I thought so. And what are you doing on my ship?"

"Running a test on my stomach—and on your stomach too and on the stomach of every man in the control room at the end. Tell me—how do you feel?" She caught the lapels of his coat, held on to them.

"You gave me a red pill. What was it?"

"The newest product of the department of biochemistry. A special development designed as a remedy for space-sickness. Did it work?"

"Why didn't you tell us what you were doing? Why didn't you bring them out sooner? Why all this yak-yak about will power if you had something. Why didn't—"

"For two reasons. First, you spacemen do have a powerful psychological block that makes it extremely difficult to find a remedy for space-nausea. You're proud of space-sickness. It's the one factor that sets you off from other men, that makes you seem better, stronger, than they are. In the face of that psychological fix no remedy is likely to work if you know you are taking it."

He stared at her. Now he did not understand what she was saying even if there was truth of a sort in what she said. Spacemen were a proud and haughty breed. "What was the second reason?"

"The second reason?" She faltered. This was something she did not want to discuss. "We—we had tested them on animals, and they seemed to work sometimes but we couldn't be sure about them and about the effect they would have on human beings, until we had tested them in the no-gravity zone

itself. So I was the guinea pig who came out here to test them."

"You were?" His voice rocked through the room. "And if they didn't work what might have happened to you?"

"Nobody knows for sure but some of the animals died."

"Lord in heaven, girl, you took a chance like that, you came out here to test a new kind of medicine that might work, and might kill?"

"There was no other way."

It was a test a spaceman could understand, a test a spaceman might run. But this girl had had the courage to do it too. He saw now what he had not seen before, that spacemen were no special breed of men, that they were just part of the human race. Where they went, in haughty pride and disdainful of all lesser creatures, others could go too. Others, like this girl here . . .

This was the real miracle.

He moved to the port and stood looking out. The Big Man Ocean itself out here, a mighty space barrier shutting off the human race from—whatever was out there.

In this moment the barrier had begun to come down. Instead of a wall, space had become a highway leading to the far-off stars. A feeling of triumph rose in him. Men would go this way now, borne on the broad back of the Big Man Ocean itself, because of this girl.

Beside him her voice was a whisper. "You are not angry with me for not telling you sooner?"

"I am very proud of you," he answered. It was as great a compliment as he could pay. He mused for a moment on some problem, spoke softly. "You could be the first spacewoman. With those pills of yours you can go to space. No woman has ever been able to do it until now. Do you want to try?"

"Do you mean that?" she whispered.

"I never meant anything more," he answered. "Do you want to try?"

He saw her nod. The feeling of triumph in him rose up,

up, up. The men of space could have partners now, they could have with them their ancient helper, the helpmeet who had followed with them along all the paths their feet had trod. Now the ancient and eternal partnership was again complete, now the race took another step along its unending journey to the stars.

Eric the Gaunt, following a pattern as old as the human race, put a long arm around this girl who had come to space. And she, repeating her part in that pattern, came

closer willingly.

# REFUGE FOR TONIGHT

#### CHAPTER ONE

THE MUSIC coming over the car radio died to a whisper, and the announcer of what had once been radio station KTP, Denver, could be heard clearing his throat preparatory to speaking. Sam Jones, ex- of the Corless Laboratories, throttled the ancient '72 model Mercury so the pounding of the devil's chorus of worn bearings under the hood wouldn't drown out the broadcast. "This is the twelve o'clock news summary," the announcer said. The English was perfect. Only the slightest trace of an ineradicable accent revealed that the announcer was a Federation man.

"We have great news for you," he said. "Eight ships docked in Eastern ports this morning, with cargoes of food, medicines and vaccines. Thousands of doctors, nurses, aids, social workers and technicians are already in America; others

are arriving daily."

"Damn!" Jones said. The stubble of black beard rising out of the yellow-tinted skin of his face made him look mean. The tommy-gun lying on the seat beside him made him look meaner—and each was an understatement of the violent feelings in him. He scowled at the radio.

"In addition to the professional people already here, tens of thousands of workers have been sent to this country—

and more are on their way—to assist in the terrific task of reconstruction in this stricken land. We in the United States are very grateful for the unstinting efforts of the Federation in sending food, clothing, medicines and workers to aid us—"

"Son-of-" Jones said. He snapped off the radio and stepped on the accelerator again. The anvil chorus began under the

hood.

For fifty miles he had been pretending he hadn't heard that chorus of connecting-rod slaps and crankshaft and mainbearing knocks, knowing all the time that he did hear it, and knowing also that it spoke with a prophetic voice, fore-telling the time when he was going to stop riding and start walking. Well, he thought resignedly, he had got a lot of miles out of this pile of junk, since he had stolen it outside St. Louis. It had carried him across parts of three States to—He scowled at the jumble of tumbledown buildings at the crossroads ahead of him, craning his neck in an effort to find a sign that would tell him where the car had carried him.

The sign post had sagged. It said Ala-g-do 1-0 m-les.

The arrow pointed upward, toward the western sky.

He wondered, was the sign prophetic? Was Alamogordo not only an indefinite number of miles away, but did the people who sought to follow the trail that maybe started there end their search in heaven?

It was a grim thought. Sam Jones was a grim man. The times were grim. And the girl who had sagged down beside the sagging signpost that pointed a weary way to heaven, and gone to sleep there, was grim too.

The noise of the car awakened her. Clad in dirty slacks, her hair tied by a frayed ribbon, she scrambled to her feet.

"Hello," Jones said. She didn't have a gun. He released his grip on the weapon lying on the seat beside him—prepared to be friendly, all the more so since he could see the unmistakable yellow tinge on her skin too, the same kind of yellow that showed on his own face. He felt sorry for her, knowing what she had gone through. But she had lived. Not many had.

From what he had seen, he wasn't certain that living was an advantage, a goal worth seeking—not if you had believed in the Republic, anyhow, and in the things it had stood for, freedom of speech and thought and deed, free men in a free world. But he was alive and this girl was alive, and he was prepared to be friendly.

She stood looking at him. He judged she was about twenty-three. There was hunger in her pinched face, tissue hunger for proteins, fats, carbohydrates; and in her eyes there was another hunger, for love, security, a home—for the simple satisfactions of living in a world that was gone forever: Fat babies and washing-machines and a roast browning in the oven, sending off fragrant odors: these things had been part of that world. And Christmas and movies and the high stool in front of a soda fountain—His mind blocked, refusing to remember.

Like a frightened rabbit, the girl turned away from him—and bolted through the door of what apparently had once been the repair garage of a crossroads service station, repair-shop, grocery story and hamburger joint.

Simultaneously, with a sharp clink and a couple of sullen clunks, the motor died. From under the hood came a rumbling sound, and a thin wisp of steam fought its way clear of the restraining metal and spurted upward, to be instantly sucked up by air avid for moisture. Grumbling at the leaky radiator, Jones scooped the gun from the seat beside him and stepped out.

From the dark shadows of wrecked cars in the sheet-iron repair garage, he could see the girl peeping out at him. "I need some water," he called. She didn't answer. But she remained there, in the shadows beyond the open door, staring hungrily at him. He moved toward her, and she slid out of sight. He stopped just outside the open door.

Streaks of sunlight filtering through cracks in the sheetiron roof cut narrow bands of yellow illumination through the shadows. Inside were several wrecked cars, the tires flat on the rims, dust covering the bodies. Some had already been looted for spare parts. Above, a dust-covered motor dangled from a chain hoist—like Mahomet's coffin, Jones thought, hanging halfway between heaven and earth. The motor was a mute memento of the repair-man who had lifted it on the hoist and then had stopped work for a few minutes, to take a little rest, and hadn't got up again. Just a little rest, only a couple of minutes! "I feel kinda tired and my heart is jumpy. I'll just set down for a little rest."

That was the way it went. A little rest. Nothing wrong, of course. Just tired. One in a hundred got up from that

little rest.

Jones looked for the corpse of the repair-man. It wasn't in sight. Somebody had buried him, he supposed, which was more than most bodies got.

"Hey, Sis," he called out,. "I don't eat girls."

"Can I be sure of that?" she answered, from some shadowy hiding place.

"What are you scared of?"

"Just cautious," she answered.

She was on the other side of the first wrecked car, watching him. A match flared as she lit a cigarette.

"You got cigarettes?" Jones said eagerly.

"A few. Want one?"

"Want one? The last package I was able to steal was in Topeka. I haven't had a smoke in a week."

She moved hesitantly to the front of the car and held out a package toward him. He stepped inside.

Like darting shadows, two ragged men came at him from both sides of the door.

### CHAPTER TWO

THE Two ragged men went first for the gun, and they got their hands on it before he had a chance to move. Jerked or knocked or torn from his grip, the gun clattered to the ground. Broken Nose clamped an iron grip around both wrists. Whiskers, the other ragged man, ran around behind him and tried to drag him backward and down. Jones jerked his left wrist free from the grip of Broken Nose, and hit that man a clop on the chin that sent him staggering backward on the run, to crash into the side of the wrecked car.

Whiskers was behind Iones with a hammer-lock around his neck. Jones squatted quickly. Reaching up, he caught hold of the man's bushy head of hair, yanking with all his strength. Whiskers wailed as Jones vanked him over his shoul-

der and threw him thump on the ground.

"Hey!" somebody velled.

Jones looked for the gun. He saw it. The girl had it. She had slipped off the safety. Acting as though she knew exactly how to use an automatic weapon, she was lining up the sights on his stomach.

The look in her eyes was clear-she meant to blast a stream of lead straight through him. He lifted his hands. "Cut it out. Sis."

He could defeat the two ragged men-in fact, he had done so-but this girl had his gun. And she wasn't paying any attention to his lifted hands. She meant to kill him.

"Hey, Jean, I know him!" somebody yelled. A third man came from behind the car, fast, and snatched at the gun. Jones hit the dirt. The safety was off. Then the man got the gun away from the girl. "I said, I know him!" He turned to Jones. "Hi, Sam!" he said.

Jones got slowly to his feet. "Hi, Jake!" he said. "Last

time I saw you was-" He tried to remember.

"The night Washington blew up," Jake Cross said. Jones nodded as fitful memory returned. This hard-faced man had been just a kid that night, a newly-commissioned jet-ship pilot, and mighty proud of his silver wings. They shook hands. "You a part of this deadfall?" Jones questioned.

Jake Cross was embarrassed. "We needed your car," he

explained.

"Didn't you think I might need it too?"

The embarrassment disappeared. "Hell, we thought you were a damned Federation spy. Anybody who drives a car in this section of the country in the daytime has probably got Federation connections."

"Uh," Jones said. "If you thought I was a Fed, why didn't

you just plug me?"

"We would have done just that," Cross said, "only we didn't have a gun. We got caught in the open at sunup yesterday morning by a damned jet-powered egg-beater. That's where we lost our car and our guns. Here, meet my pals. This is Jean Crane. . . . Sam Jones."

The girl nodded, warily, thought Jones. "So that sleepingby-the-sign-post gag was just part of the bait?" he asked.

The girl only nodded. There was neither apology nor hostility in her manner. Sure, she had been the bait for a trap, leading a man to his death. What of it? What did the life of one man, more or less, matter? Jones grinned at her, boldly. "No hard feelings," he said.

"None," she agreed. She grinned back with equal boldness.

"This is Bob Talbot—and Chuck Balne." Broken Nose, it turned out, was Bob Talbot. He had the same elusive yellow tinge to his skin, but he seemed to harbor no animosity because of the lick on the chin, and he shook hands cordially. Balne's skin was yellow too, but his eyes were green—and evasive. Looking them over, Jones wondered what they were doing out here in New Mexico. He suspected that he knew—and Jake Cross answered his question promptly. "The same thing you are doing, Sam. Looking for a button to push."

His voice was hard as he spoke, with bitter overtones of hate in it. "Personally, that's what I'm doing. That's why I came west. I picked up Jean in Memphis. Talbot in Little Rock. Balne was sitting beside the road about fifty miles

back."

"Button, huh?" Jones said. "Push-button?"

"Yeah," Jake Cross said. "Push-button on an atom bomb." Jones scratched his chin. "You want to blow somebody up?" Jake Cross looked at him, a hot flashing glance, then

looked away. "That's what I had in mind."

"Somebody like-er-the European Federation?"

Cross nodded. The others were silent, listening. Jones shook his head. "If you should push a button on an atom bomb that just happened to be sitting in the warhead of a rocket that was in a launching cradle aimed at one of the cities of the Federation, that would be an act of war, Jake. And there's not any war."

"There isn't?" Cross' voice was knife-sharp.

"I just heard a radio broadcast about how the Federation is helping this poor, suffering nation," Jones said. "You wouldn't want to blow up our friends, would you?"

"Sam," Cross said earnestly, "there's going to be a war going on, if I can find one of those hidden launching sites. You can bet there's going to be a war." He laughed, and his voice cracked. "If I can find an atom bomb, I'm going to ride it down to its target. Won't that be a joke, Sam, on the Federation?" His laughter came again, in a wild burst. Carrying the gun, he turned and walked back into the dark garage.

Jones found himself facing three sets of suspicious eyes.

"What's wrong with Jake?" he asked.

It was the girl who answered. "His wife had the yellow flu," she said.

"Oh," Jones said. For a moment the sorrow of Jake Cross touched him; then he shrugged and put it out of his mind, a trick he had performed so often to save his own sanity that it now had become second nature. He looked from one to the other. "So you're all trying to run down the rumor that we had a couple of hundred atom bombs, in secret launching sites, aimed at most of the important cities of the world, ready to use in case the country was attacked? Well!" And his shrug came again. "Personally, I think that rumor is a crock. I don't think there are any atom bombs ready to be launched." He watched them to see how they would react.

"You talk like a man with a hole in his head," Talbot

grunted.

"There's no doubt that we have them," Balne said. "The Feds have found one site already."

"Well," Jones said. "Now we're getting somewhere! How

do you know this?"

"A fellow in Amarillo told me a couple of weeks ago,"
Balne answered. "It was in the Black Hills. The rockets
with atom bomb warheads were already in their racks.
Computations already made to land them on any city on
earth. Of course, you might miss ten or fifteen miles—"

"That's a hit, with an atom bomb," Talbot said. "What makes you think these reports are just a bunch of phony rumors, Sam? Are you trying to draw us out?" He watched

Jones very closely.

Jones shrugged. "If we had had atom bombs, we would have used them." He had told himself this a thousand times.

Jake Cross came out of the dark part of the garage, answering him: "Hell, how could we use them? There isn't any war, officially—you're right about that; and we weren't even sure there was an unofficial war until half our population was dead—from the yellow flu, and those who were left alive were all trying to find a safe place to hide. I'll bet there wasn't a gun-crew left alive at a single launching site when the orders to fire came through, if they ever came through, which was doubtful, since the officers who could give the orders were probably dead themselves. Sam, damn you, if you think this story of the hidden bombs is just another wild rumor, what the hell are you doing out here, in the section of the country where the launching sites are hidden?"

He spoke with blazing intensity, and the gun was ready in

his hands.

Jones shrugged again and grinned. "Well, Jake, I got to admit I was trying to draw you people out a little, to protect my own neck in case one of you turned out to be a spy. As to what I'm doing out here, I thought, if I looked around a little, maybe I might find a launching site—and push a button or pull a lever or something."

As he spoke, the suspicion went from their faces. He was one of them. That was what they wanted to know. Jake Cross grinned, and slapped him on the back, and handed him his gun. "Damn you, Sam," Talbot grunted. "For a minute, you had me going." Only Balne seemed to retain a part of his suspicions, and he hid them by looking in the other direction.

"Those bomb-launching sites do actually exist," Jean Crane said. In her voice was a new animation. "The others know this, but you don't, Sam. They exist—and I have a map to one of them."

"Eh?" Sam Jones said excitedly. "What's that? What did you say, girl?" Even his iron control was shaken. "You've got a map to one of them? Where in the hell did you get it, and where is it?"

"I was an Army nurse in a hospital in Baltimore, Jean Crane answered. "One of my patients was General Deepers. I got the story of the map from him while he was delirious; and after he died, I got the map from his belongings."

"Holy hell!" Jones said. Here was a miracle beyond the comprehension of the mind. A map to one of the bomblaunching sites! A map!

"Shhh!" Jake Cross said suddenly.

The whistling sound was barely audible. But they knew what it meant. Helicopter vanes!

"Hit the dirt!" Jake Cross rasped.

They hit the ground, fast. The bomb hit right behind them.

### CHAPTER THREE

THE BOMB was probably a fifty-pounder. Jones' car must have been the target, for the bomb hit just on the far side of that vehicle and rolled the car like a clumsy, wobbling top. It also shot a column of dust high into the air. Bomb fragments and gravel rattled through the tin-walled repair garage like—like red-hot iron pounding through a tin

building. The sagging front door took off like a wrecked plane trying to fly again, and whammed into the nearest car. A tornado of dust howled through the garage.

Gravel began to fall on the roof.

During the moments when the hail of gravel pounded down, Sam Jones lived again the terrible destruction of America, and how it had come. The vellow flu had come first, of course. You got a little sick; you caught the sniffles, you ran a temperature for a couple of days; you got well. You thought you had had another damned cold. The doctors thought the same. But this epidemic of colds popped up in all the major cities of the country at approximately the same time, and spread like fire on oil. The infections were mild; not much treatment except bed rest was needed, and everybody recovered-or apparently so. Three months later, it hit. The skin turned faintly yellow. If you didn't move a muscle during the next ten days, you might get well. But the slightest exertion-thousands had died from the effort involved in just sitting up in bed-and your heart fluttered out on you. During those three months that had passed since you had had that "cold," the virus of the vellow flu had attacked the heart muscles.

Sam Jones had been lucky. He had caught the disease after it was known that complete bed rest gave you a chance to live. For ten days he had moved nothing except his eyes.

The Black Death in Europe in the Middle Ages had created no such panic as the yellow flu did. The dying were left to die as millions deserted the cities, only to find the yellow flu virus was just as deadly in the country. Barricades were set up at every town and village, to stop the mad flight of refugees carrying the infection. But the stream of panic-stricken humanity flowed around the barricades and over them and through them.

Efforts were made to isolate the virus, to make vaccines. If there had been time—and if the research men could have lived long enough—the efforts would certainly have been successful. A vaccine existed. Otherwise, how was it possible to explain the immunity of the ship loads of "relief workers" the European Federation was rushing to the aid of the stricken country? Federation doctors, nurses, soldiers (to keep order) didn't catch the disease. Why were they immune?

The first time this question was asked publicly, Washington was blown up. The Federation leaders were horrified at this unfortunate accident (obviously one of the atom bombs the United States was known to possess had exploded by chance) and rushed whole fleets of relief workers. Then, because the last Government officials who had escaped the flu had died in the blow-up, and because the country was without responsible direction, it was obviously necessary to declare martial law, to control the remaining population and to prevent the spread of the infection ravaging the country.

In its day, the phalanx was a new weapon. Rome used it to win an empire. In another day the Blitzkrieg was a new weapon. Hitler almost succeeded in winning an empire with it. At the end of the Twentieth Century, another new technique in empire-building had been discovered. It was decimation of population by bacteriological warfare, followed by conquest by rushing in armies disguised as "relief" expeditions.

Anybody who had survived the yellow flu, and who thought aloud that America had been destroyed and occupied, was obviously a fascist—and an outlaw. It was the proclaimed duty of every loyal American to assist the humanitarian efforts of the Federation in every possible way. And because the bomb-launching sites that rumor said were hidden somewhere in the country were a menace to public safety, it was obviously the duty of all loyal Americans to come forward with all information about them.

As long as those bombs were in existence, the Federation would be uneasy-very much so. The sword of Damocles was tipped with uranium now, just below critical mass. Would

any public official, technician, Army officer who possessed information—

Nobody seemed to possess such information. Nobody came forward. The soldiers of the Federation, driven by frantic orders from home, searched desperately for the bomb-launching sites—to pull the uranium teeth of the sword of Damocles. Others searched too, fully as desperately, though not from the same motives. Sam Jones, Jake Cross, Jean Crane—hundreds, maybe thousands—searched, with one simple thought in mind, just one little thought: to push a button, to pull a lever.

Only-just where was the button hidden? The high officers who knew, were dead. Button, button, who's got the button?

Under the wrecked car, Sam Jones sneezed. "Here comes another one," Jake Cross said.

The second bomb hit beside the building. The roof went up. The sides went down. The bomb-fragments going through the sheet iron sounded like an army of beavers chewing down a forest of petrified trees.

"They'll kill us," Balne whimpered. "I'm getting out of here."

"Lie still," Jones said.

"That's a Fed 'copter over us. The next one will get us, sure."

"If you start running, a fifty caliber slug will get you, and that's for double sure. Lie still. If nothing moves, they may not drop another one." Balne gurgled in his throat, but did not try to move.

"You all right?" Jones whispered to the girl.

"How would I know?" she answered.

"They're landing," Jake Cross said.

The 'copter eased to the ground about fifty yards from the tangled pile of tin that had once been a crossroads service station and garage. It was an American-made machine, now taken over by the "relief" mission, and no doubt appearing on the official records somewhere as assigned to carry food and medicines to communities desperately in need of them. It carried three men, including the pilot. Landing, the pilot stopped the vanes and swung a mounted machine gun around so that its muzzle covered what was left of the building. Then he lit a lazy cigarette and leaned back while the two soldiers came to investigate. Clad in the gray-green uniform of the Federation, the linked-chain symbol prominent on their shoulder patches, their sub-machine guns sagging nonchalantly from their hands, they went first to the crater left by the second bomb, to look at and enjoy their handiwork.

Jones, under the sheet iron, centered the sights of the tommy-gun on the pilot, and pressed the trigger, lovingly, tenderly, caressingly.

The pilot lived just long enough to loose a wild burst from the mounted machine gun. Then Jones swung the tommy-gun to the two soldiers. They lived a little longer than the pilot—but not long enough to find a target for their fire. Jones crawled out from under the wreckage, detached the clip from the gun, and reloaded it with .45 cartridges taken from his pockets.

While he reloaded the gun, Jake Cross and Bob Talbot came crawling out from under the wreckage. Walking like men who know exactly what they are going to do, they approached the two dead soldiers, and began to strip the bodies of weapons and ammunition. Cross looked toward the helicopter. "I can fly anything that's got wings," he said.

"Well," Jones said, "and here I figured I was going to have to walk!"

A sound came from the wreckage. He looked down. The girl was trying to move a sheet of iron to free herself. The wrecked cars had saved her, as they had saved the others. Jones helped her to her feet. "You were saying something about a map?" he said.

From a badly battered purse, she took the map, and a pair of glasses.

The map looked as if it had come from a service station.

It even had advertising matter printed on it. "Buy Sky High Gasoline and Get There on the Ground or in the Air." It had a picture of service-station attendants swarming around a car as they serviced it. In the background they were servicing a helicopter. In the far background were palm trees and an ocean. Just looking at the map made Jones a little sick. Ads like this were gone forever. The copy writers who wrote them, the public who glanced casually at them, the presses that printed— No, the presses were not gone. One nice thing about conquest by bacteriological warfare and relief expeditions was the fact that the material resources of the conquered country could be taken over intact.

"Look at it through the glasses," the girl said.

To the naked eye, the map revealed nothing. Through the glasses, two faint red lines could be seen intersecting high in the mountains of Colorado. "When he was delirious, General Deepers talked about an abandoned mine," Jean Crane said.

"Um," Jones said. Inside, he felt frozen, afraid to move. He hadn't felt like this since he had had the yellow flu. "Button, button!" he muttered. Did he had the long-sought button in his hands? His hands began to shake. The girl watched him with thoughtful, perturbed eyes.

Balne crawled out from under the wreckage. Neither

The helicopter vanes began to spin. Jones, staring at the map, did not notice.

"Why are you shaking?" Jean asked.

"I am thinking that pushing buttons will not bring back the dead," he answered.

"You are not suggesting we don't push any buttons?" she said.

"No," he answered. "But you know, and I know, that the Republic is finished, ended, done—and that pushing buttons won't bring it back. We have to face the facts, Jean—America has finally lost a war, irrevocably."

Sadness crept into her face. "I know," she whispered. "We

all know it, though none of us like to admit it. And what's to be done about it? Destroying our enemies will not bring back the land we loved."

"No," he said. Musing crept into his voice. "You know, after the Civil War, when the Confederacy was finished, ended, done, what some of the Confederate soldiers did? They emigrated. A great many of them went to Brazil. They founded a little colony there, of unreconstructed rebels."

"What happened to them?"

"I don't know," he answered. "And that doesn't matter. What I was wishing was that there might be some Brazil for us, some land of refuge where we might keep alive at least the memory of the America that once was. A patch of meadow, the slope of a mountain, a place where a man might raise up some kids to tell his story to—that's what I'm wishing for!"

She stood very close to him. He could see the longing in her eyes. "Where is this place? The Federation has a long arm, you know."

His laugh was grim. He looked around for the sign pointing the way to Alamogordo. The bomb blast had blown it down, so that now the arrow pointed straight up.

"There's the only place I know: Heaven."

Jake Cross came grinning from the helicopter. "Final takeoff," he said. "Last flight leaving in two minutes. At the next stop we'll all take turns pushing buttons."

They followed him to the waiting ship.

#### CHAPTER FOUR

Jake Cross brought the ship down in a valley already dark with coming dusk. Off to one side, the blank face of a cliff lifted five hundred feet into the air. To the left, on a sloping fir-dotted hillside, the weather-beaten buildings of a small deserted mine squatted like dirty children trying to make up their minds to take one last slide down to the bottom the hill.

The air was clean and tangy with the odors of mountains, and gratefully cool. Jones sniffed the coolness into his lungs. He glanced out at the mountains rolling away into the distance. "Good country to be alive in," he said.

Jake Cross stared rapturously at the mine buildings. "Nice map, Jean," he approved. "The Feds could hunt through those mountains forever, without finding rocketlaunching sites, unless they had a map. Open her up, Sam. We've got some buttons to push."

Jones stepped from the ship into what looked like rich green grass-and quickly changed his step to a jump when he saw what was concealed in the grass. The girl stared at it. "A skeleton!" she said.

Bits of brown cloth were visible, and a rotted holster which still contained a rusty .45 automatic. Jones cut a stick and scraped around among the moldy cloth, finally finding a piece of tarnished silver. "Chickens," he said. "It looks as if your map was dead right, Jean. This fellow was a colonel. And they didn't use colonels to run errands." He stood up.

"Wonder what happened to him?" Cross said.

"My guess is, he came here to push a button," Jones answered. "And this was as far as he got." Poking again with the stick, he brought up a piece of cord and a fragment of nylon. "He parachuted in here."

Very gravely Jake Cross saluted the skeleton. "We'll push

a button for you too, Colonel," he said.

Jones looked away. He looked at the mountains and at the distant sky bright with the glow of sunset. Dots moved in that sky. He followed them with his eyes, his mind not concerned with their meaning. 'Copters-eight or nine of them. Suddenly, realizing what they meant, he yelled. Staring, the group froze.

"They spotted us on their radar, and are coming to see

what makes!" Jones said.
"Son-of-a—" Jake Cross began.

"Head for the mine," Jones said. "They're sure to spot

our ship, and we haven't got time to hide it. And we can't outfly 'em."

They headed for the mine, on the run. "If I can only push one button before they get me," Jake Cross panted. "Just one, Lord—" Pushing a button had become an obsession with him. They scrambled up the talus slope to the mine.

If Jones had seen this mine under other circumstances, he would have passed it by; but with the evidence of the map, he dared to hope that this might actually be one of the launching sites—or maybe even the secret headquarters of what rumor said was hidden somewhere in this Western country.

The prospector who had originally dug this mine had run his tunnel straight into the slope of the hill. Around the entrance he had built a sheet-iron shack. The wooden buildings looked like living- and storage-quarters. At the tunnel, a door was sagging from a single hinge. They ducked inside—and stopped, staring.

A machine gun was mounted in the tunnel. Behind the light-steel shields of the gun, watching them through the aiming peephole, was a man. He regarded them impersonally. "Just lay down the guns," he said.

Sam Jones jerked his head toward the skyline. "Federation

'copters coming," he said.

The guard nodded. "I know. I saw 'em before you did. That's why you're still alive."

"What?"

"If it hadn't looked like the Feds were after you, I'd have rolled you over down below—because of the markings on your ship. But if you were running from Feds, even in a ship with Federation markings, I thought maybe you deserved a chance to talk. So, if you want to lay the guns down, you can talk. If you don't want to lay 'em down, it's all right with me. And your story had better be good, because no matter how good it is, the fact remains—you have brought Federation soldiers to the secret bacteriological laboratory."

"To the what?" Jones gasped.

"The Laboratory of Bacteriological Warfare," the guard answered. "After you've laid the guns down, tell me what the hell you thought it was."

They laid the guns down. They looked at each other. Jones looked at the girl. "This General Deepers who gave you

the map, what branch was he in?"

"The-the Medical Corps," the girl answered.

"Deepers?" the man behind the shield showed sudden interest. "He was in charge here. Do you know what happened to him?"

"Damn!" Jones said. "Deepers was a medic. And of course his map would lead to a damned bacteriological

laboratory."

"What map?" the guard said.

They told him the story, in jerky, broken, hopeless sentences. Outside, in the meadow below where they had left

the ship, the first bomb exploded.

"I'll have to take you in," the guard said. "This place is not what you thought it was, but you can come in, anyhow. Pick up your guns and help me carry this one. The whole mountain here is a honeycomb of caves. The lab is below us.

Outside, another of the bombs went bloooom! Jake shook

his fist at the sound. "Some day, damn you-"

The guard produced a spring-powered flashlight, and led them into the tunnel. Ahead of them a stone rattled. In the dim beam of the flashlight a man was visible. Looking at him, Sam Jones felt his flesh begin to creep. The man was tall and thin to the point of emaciation. He had a long beard and his clothes were dirty and ragged. His face was gaunt and pinched. "Is that you, Raymond?" he said to the guard.

"Uh-huh," the answer came. "What are you doing up here, Joe?" His voice was suddenly gentle with overtones of sad-

ness.

"I was going up to look at the stars tonight," the gaunt specter answered. "I want to see them again. We're going there, you know."

"Sure, I know," the guard answered soothingly. "But you had better not look now, Joe. There are some bad men outside. Hey, Mac, what's on *your* mind?"

Sam Jones was pushing forward. He didn't hear the guard's question. "Dr. Corless?" he whispered. His legs were shaky, and his heart was jumping. "I guess you wouldn't remember me, sir, but—" He stammered the words. Glittering eyes in a gaunt face turned toward him as the guard flashed the light in his face; then the gaze turned inward as though seeking some elusive, haunted memory. "I'm Jones, sir," Sam said. "Samuel Jones, sir."

"Jones?" The man savored the feel of the word, testing it for the memory impressions that once went with it. And went with it still, for a moment. "There was a Jones on my staff. A brilliant man. It almost broke my heart to have to deceive him. Jones. . . . Ah—" The words limped into silence as the memory connections were broken again.

"That was I, sir," Jones said. And he stood very straight and very proud as he said it. He knew this man, this ghost, as one of the foremost physicists in the world, before—even the memory was painful—before the Corless Drive had failed. He remembered the newspapers shrieking the headlines: Scientist Claims to Have Discovered Drive for Space Ships.

That had happened before the yellow flu had come, and might have been one of the reasons why the disease had come when it did. Corless had been working for years with money supplied by the War Department. The generals had been proud of him. They had had their pictures taken with him. He had discovered a drive for space ships. He had built a model. A new era in transportation! Ships to reach the planets, ships to reach the stars! Not rocket ships, clumsy and dangerous, but ships driven by an entirely new principle—the Corless Drive. A public demonstration of this epoch-marking invention had been arranged. The generals

were there, Congressmen, Senators, the President, the newspapers, the telecast men, movie camera-men. For the men who worked for Corless Laboratories it had been a proud day, the day when dreams came true.

The demonstration had been a complete failure. The model ship hadn't even budged from the ground.

The next day a Senator rose in Congress and wanted to know why public money was being used to finance every crackpot inventor on earth.

That had been the end of Corless. Publicly, it had been announced that he was under the care of a psychiatrist. His research staff had been fired, his project abandoned. Jones had supposed him dead. Now, in a tunnel that smelled of dank air, he was meeting him again, watching him try to turn back his mind to a happier day that was gone, talking about looking at the stars— "We're going there, you know"—while Federation bombs were shaking gravel from the tunnel roof.

"You don't remember me, sir?" Jones whispered.

"For a moment, I thought I did," Corless answered. "But

it's gone now. So many things are gone-"

"And that had better include us," the guard spoke. "Sorry, Joe. We've got to move on, and you've got to come with us. You can go look at the stars some other night." His voice was very gentle, but firm.

"Some other night?" Corless repeated vaguely. "I've been hearing that so long—" Then, with a gesture of his hands that was the added straw of misery which broke the back of Samuel Jones, Corless turned and trotted along the tunnel.

Jones was glad of the darkness. It hid the moisture on his face. But the sag of his shoulders revealed what the darkness hid. He felt the girl's hand on his arm. "Did he mean that much to you?" Her whisper was very gentle.

"I worshiped him," he said. "He was Mr. America."

"I don't understand."

He tried to find words for the emotional pressures in him. "You know what foreign nations used to call us-Uncle

Shylock and things like that, money-grabbers, dollar-worshipers. It was true. We were trying to grab something, all right, every man Jack of us was trying to do it, but it wasn't a dollar. It was—stars. There hasn't been a kid born in the past twenty years who didn't come to believe with all his heart and soul that our destiny was in the stars—and that Joseph Corless would take us there."

"And he failed?"

"I don't know whether he failed us, or we failed him. But somebody failed; that's for sure."

Her fingers tightened on his arm, gently. Ahead of them, like the ghost of a prophet whose prophecies had failed, Joseph Corless turned a corner of the tunnel and shoved hard on a rock projecting from the wall. A narrow door swung inward. The guard took the lead now, following a tunnel that ran downward on a steep slant. There were two more concealed doors, the last one opening into a long, low-roofed cavern illumined by fluorescent lights. On the floor directly in front of the door a fat boy-baby was crawling on hands and knees. His mother, watching him from a room that looked and smelled like a kitchen, ran and snatched up the child at the sight of them.

"Dr. Morrison is in charge here," the guard said. "I'll

take you to him."

Dr. Morrison was tall and pale—and not happy to see them, or to hear their story. "We have never refused sanctuary yet," he told them. "It is too late to begin now. However, I wish I had never seen you."

"Sorry," Jones said. And meant it.

Morrison shrugged tired shoulders. "Maybe we won't be found. This place is well hidden, and the job was done by experts. Maybe they will think you got away in the mountains." He spoke to the guard: "See that they are fed."

They were fed by the mother of the boy-child, on broiled venison. "We supplement our stocks by hunting," she explained. "Stored food is running low."

"How many do you have here?" Balne asked.

"Seventy-one men, thirty-nine women, and eight children, most of them born here, like Fat-legs." She nodded toward the baby.

"He seems to be thriving," Jean Crane said.

"So far, we haven't run short of food for children, although I don't believe the supply will last another year."

"What then?" Talbot said.

She shrugged. "I haven't thought that far ahead. We have stopped thinking here. Hello, Joe," she said to the gaunt specter who came hurrying up to the table. "Are you hungry too?"

Corless shook his head at her, and went directly to Sam Jones. "Jones?" he said. "Jones I've got something—"
"Yes sir," Jones said, rising. "What is it, sir?"

But Corless was shaking his head, and his face was going blank again. "It's gone," he said. "I had it for a moment, but now it's gone." Mumbling to himself, he turned away and trotted out of the room.

"Do you just let him run around loose?" Jones questioned. The cave-woman shrugged. "He's harmless. And he comes and goes as he pleases. Sometimes he's gone for weeks at a time. Then he pops up some morning for breakfast. We don't pay any attention to him any more."

Far-off, a bomb thumped. "I wonder what they're bomb-

ing?" Take said.

"Cedar trees and each other, in the dark," Jones answered. "I hope." He sighed. Outside were men with bombs and machine guns and every other weapon ever designed by the human race for destruction of its fellows, including bacteriological warfare and war by "relief." But here in this cavern there was peace; here was security-but only for the night. That was the catch. This was a place of refugefor the night.

He wondered if the time would ever come when he would have refuge for the year, or for a lifetime? There were a lot of things about the Corless Drive that he would like to

work on, if he had time.

"I want to talk to you," Jean Crane said. She linked her arm through his, and they strolled through the cavern. Men and women looked at them, nodded, and went on with their tasks, pretending indifference to the bomb thumps outside. Their indifference was only a sham covering desperate fear, Jones thought. Or was the indifference real? Had these people reached the point where nothing mattered any more, where death would be a relief? Was death the real haven for the night—and the only one, for them?

The thought shocked him.

"I'm sorry about the map," Jean Crane said.

"Forget it," he answered.

"But I can't forget it. I keep remembering what I have done to these people."

"The worst you have done is to bring closer a day that was coming anyhow. They have food for perhaps another year. Then they are going to have to give themselves upfor they're doomed, and they know it. This place was designed as a laboratory, but work has stopped, which proves that they know what's coming. When work stops, hope is dead."

He gestured toward the unused chemical equipment, the dust-covered lab benches.

Dr. Morrison came along. He saw them and stopped. "Corless was looking for you," he said to Jones.

"He found me," Sam answered, and explained what had happened.

"You seem to remind him of something," the Doctor hazarded. "Only he can't quite remember what it is."

"I know," Jones said. "I remind him of the time when he was the biggest scientist in the country—when there was a country."

"In that case, it's probably better if he doesn't remember," Morrison said, and walked away.

They found a room that had been fitted up as a lounge with book-lined walls and reading lamps and soft chairs, for the leisure hours of the staff when this had been a working laboratory. They sat down. Jones did not quite understand how it happened, but within five minutes the girl was curled up in his arms and was sound asleep. She slept like a child, her face serene and composed. He put his arm around her and patted her shoulder, and she stirred sleepily and snuggled closer.

"Sweet dreams, Jeanie," he said.

Whether they were sweet or sour, dreams were all that was left.

He did not know when he went to sleep himself. His body was drugged with fatigue. In the fatigue-drugged sleep that came, he had vague intimations of voices raised in angry shouts, and of the sound of someone running, noises not equal to the task of awakening him.

Much later came the sound equal to that task-the thunderous echoing roar of a machine gun operated at full

automatic blast.

### CHAPTER FIVE

Jones had been dreaming about Brazil when the machine gun let go. Like a phantom that it was, the dream fled from his mind as he struggled to his feet. He and the girl ran to the

open door of the lounge.

Most of the lights had been turned out in the cavern, but a few had been left burning. At the far end, the lights revealed men desperately at work—throwing up a rough barricade around a door that had been knocked from its wall concealment. The machine gun, with Raymond behind the shields, was mounted there—and firing straight into the dark opening.

"Looks as if we've got visitors," Jones muttered. He and the girl, keeping out of the line of the tunnel, moved in that direction. Talbot, a bloody bandage on his head, was helping three men shove a heavy table in front of the entrance. "That so-and-so, Balne," Talbot said, "was a Federation spy. He

slipped out, knifed the guard at this exit, and has led the Feds in here."

Steel rattled on the shield of the gun, and Raymond fired a blast in reply. "The tunnel curves," Talbot explained. "They blew the door from the other side, and Ray ran 'em back. Now they're bouncing slugs at each other around the curve of the tunnel."

The cavern was alive with sound. At the other end, a long procession was moving through a side exit, apparently carrying out a prearranged plan of evacuation in case of attack. Morrison came hurrying up. He handed each of them a white pill. "The others already have them," he said.

"What are they?" Jones asked.

"A derivative of cyanide. Two minutes after you swallow it—that's all."

Jones stared at him. Sleep was still fogging his brain. Somehow or other he couldn't make himself think clearly. "But these people," he protested, "can give themselves up. They don't have to die."

"We have already considered the matter and made our plans," Morrison answered. "We took a vote on it. No one voted to surrender."

"But there are children here!" The girl's voice was sharp.
"I imagine there is room for children in heaven," Morrison said. He moved on. They stared after him Jake Cross came up. "Last barricade," Cross said. "Last roadblock, last stop. All out here."

Whooom!

The pile of tables, workbenches, in front of the entrance disappeared. Thunder roared in the cavern, and roared again. The gunner with it, the machine gun rose as if it had sprouted wings. The gunner hit the floor, tried to crawl, then quietly cuddled his head in his hands.

In the silence somewhere a frightened child began to whimper.

"I wondered how long it would take 'em to bring up rifle grenades," Jake Cross said. He cuddled the tommy-gun he was carrying. "Well, I can hide to one side. Then, when they come through the entrance I can knock 'em off." He nodded to himself, as if he had thought his plan through and was satisfied with it, and looked at his watch. "Hello, it's six o'clock in the morning. Outside, it must be daylight now. Who'd have thought the night was over?"

Somewhere a man was breathing in agony. The last of the line was moving into the exit, hurrying to—what refuge now?

Jake Cross seemed to listen. "Morning," he said. "Bugles. Reveille." His head came up. He seemed to look beyond the cavern, to unseen worlds.

Beside them a woman who had been helping build the barricade suddenly sat down with her back to the wall. Around her neck was a piece of dirty string. She pulled on it. Up from between her breasts came a heart-shaped locket. She snapped it open. The locket contained a single white pill. Her throat muscles working, she swallowed it. Then she sat very quietly beside the wall. Her head was up too, her face calm, her eyes serene.

Machine-gun slugs whined into the cavern. Jake Cross shifted his gun. "I can hold them here for a couple of hours," he said. "Run along, you two, and take a chance on life." He nodded to them, and strolled off, whistling. They watched him take up a position where he could cover the entrance.

Against the wall, the woman suddenly dropped her head.

"This is killing me," Jones said "I'm dying here, right here, right now."

In the dim cavern a voice was suddenly calling: "Jones!"
Sam Jones lifted his head. A dazed look was in his eyes.
"Here I am, Gabriel," he shouted. "Just look this way and see me."

The girl jerked at his arm, crying, "Saml" He didn't hear her.

"Jones! Samuel Jones!" the voice called again.

"Here I am, Gabe," Jones answered.

A gaunt figure emerged from the dimness, came striding toward them. It was Corless.

"Jones!" Corless husked. "I finally remembered you. Then I remembered what it was for."

Jones nodded, as if he knew what the hell it was all about. "Well, Gabe," he said gravely, "it was nice of you to remember what Sam Jones was for. It's more than I have ever been able to figure out."

"Sam!" The girl's fingers were little steel-tipped rods digging into his arm, rods that he didn't feel. Corless stared at him. He bowed. "Gabriel, allow me to introduce my companion, Miss Jean Crane. She's a nice kid, Gabriel. Fix her up with the best accomodations you've got upstairs, please. Gabe."

Corless slapped him. He didn't feel that, either. Corless said: "Damn you, listen. I know I've been crazy, but I'm not crazy now. I knew where it was, but I couldn't remember what it was—until I saw you. You released my blocked memories."

"Ah," Jones said.

"Listen, damn you! This bacteriological laboratory was only a cover-up for something a damned sight more important. We had to have *some* excuse for all the work that was being done here. The lab was that excuse, but there is another hidden cavern here."

Sam Jones blinked startled eyes. Somewhere there was a grain of sense in this, if he could discover it. "And what do you have in this second cavern?" he said.

Corless glowed. "A space ship," he said.

"Gabriel has a space ship," Jones said.

"The first one ever built," Corless said.

"The first one—" Jones choked. Then his voice came again, blazing with fury. "Gabe, damn you, don't you start this all over again! I'm a dead monkey, and I'm happy to be that. You let me be a dead monkey, Gabe."

Corless spread his hands in a hopeless gesture. "Please,"

he whispered. "This is the first ship ever built with the Corless Drive."

"Floppo," Jones said. "The Corless Drive went floppo. I

was there."

Corless wiped sweat from his face. "We engineered that flop," he said. "We had to do it, no matter who got hurt—to try to hide the fact that the drive was a success."

"Why?" Jones said.

Pain gouged lines in the face of the scientist. "Because we knew the Federation existed, and because we knew they planned to use bacteriological warfare on us. We knew, also, that if the Federation leaders had reason to believe that we had actually constructed a space ship, their bacteria would be turned loose on us instantly—to stop us from completing what they thought was the most decisive weapon ever invented."

Jones felt the sweat on his face. He wiped it away and tried to think. "I thought the atom bomb was pretty decisive," he said. "I heard that the idea of atom bombs in launching cradles was what held up the Federation for a long time—and is still driving them nuts."

"There isn't an atom bomb in a launching cradle anywhere in the United States," Corless said. "There never was one. The high command started that story. They called it their Threat of the Big Stick. They hoped to use the threat to scare off all attacks until war was outlawed. They were fighting for time, and the Big Stick was their weapon."

The fright in Jones' eyes was a minor echo of the fear inside of him. Corless was telling a story with so much sense in it that it might be true. And Jones was afraid to let himself think it was true until he knew. All he knew for sure was that Corless had been insane, and might be insane still.

"There was the matter of your staff being disbanded, your project dropped, and you under the care of a psychiatrist."

"Every word of it was true. My staff was disbanded; my good men were scattered, to carry out the subterfuge. Believe

me, it hurt to let the men who had believed in me think I had failed. But it had to be done. And while it was being done, I recruited a new staff, which was brought here, blindfolded, every man of them, and sworn to secrecy, and put to work building my ship. I had over a thousand men working for me, over there in that cave." Corless pointed off into the distance. "They built the ship."

"And what happened to them?" Jones asked.

"The yellow flu was what happened to them," Corless answered. "They all died, and I lived. And on the day when the last man died, I really went crazy." He passed a hand across his eyes to shut out the memory. "I know," he said. "When you came here last night, I was insane; the people in this cavern all thought me insane. And I was. They would have helped me man the ship, if I could have remembered what it was or what it was for. But I couldn't remember that. And I was afraid to tell them even that it existed. I kept going back to it and trying to remember what it was. But my memory was blocked, until I saw you. You were the link my mind needed. You released my memory."

There was agony in Jones. The grain of sense had grown to a mountain. The whole story fitted together but—how did

he know?

"I'll believe, when I see it," he said.

"That's one of the reasons I came for you," Corless said.
"I want to take you to it. I need you too. You're the last of my old staff, and I need you desperately."

Jones turned to the girl. "Gabe wants us to come with

him," he said.

Machine-gun slugs rattled from the walls. Jake Cross fired a burst in reply. They looked at him. He waved at them. "I heard what he told you," Cross called out. "Go with him, you two, and take your chance on life." He waved at them.

"Jake, come with us," Jones said.

Cross shook his head. "This is my last barricade," he said. "Yours may be somewhere else, but that's the chance you've got to take. The fight is never over until the last

barricade goes down. Move on, you two, and set up the next road-block, or take your chance on life, whichever way it turns out."

He had lit a cigarette. They saw it glowing in the dimness long after the man himself was lost, but a little star of

hope shining above the last rampart.

They joined the tail end of the procession moving out of the cavern. In the tunnel Corless fought his way to one side, took them in another direction. The tunnel opened into an immense, dark area. "There is stored power, for emergency operation of the lights," Corless called, somewhere in that darkness. "Wait until I turn them on."

High across a vast ceiling the lights came on, revealing the long shining bulk that lay in the cavern—an airship. A murmur came from the watching group. The sound grew and grew until it whispered back from the whole vast cavern. Awe and wonder, the birth-cries of hope being born again, were in the growing sound.

Sam Jones stood with his feet planted wide apart. Corless,

glowing, came up to him.

"I still don't see the point," Jones said. "The Federation has so tight a grip on earth that no nation will dare give us refuge. If we take this ship out of here, we'll just be giving it to the Federation."

"You don't understand," Corless answered. "We're not seeking refuge on earth. The ship is fueled and stocked with food and ready for flight to the planets—to the stars, if necessary."

Sam Jones' chin came up sharply. "Then, Gabriel, lead us on!" he said.

Around the deserted mine, helicopters swarmed. They had flown in from every direction, bringing more search parties. The Federation knew it had found something here; it didn't know what. Search parties covered every inch of ground. Underground, Federation soldiers fought their way into the cavern.

Across the valley a cliff reared a blank face hundreds of feet into the air.

Suddenly the whole front of the cliff was blown away by blasts from hidden explosives. A dark hole was opened there, and the helicopters nosed toward the hole.

The long ship came out of the hole on a slant. It rose and rose, gathering speed. The method of propulsion was not at all apparent, except that it wasn't rockets. From portholes, figures looked out.

The helicopter pilots, driven by frantic orders from below, loosed machine-gun fire at the ship. The slugs bounced from a steel hull. The ship rose, and kept on rising.

Inside the ship, Sam Jones looked from a port. One 'copter was making a tremendous effort to catch up with the ship.

For the first time in years, Jones, watching, laughed. "You will have to settle with the sons of my grandsons," he said. "I'm going to find a chunk of a star somewhere, where I can raise me some kids to tell my story to. You'll settle with them."

It was futile, yes; he knew it. The sons of his grandsons would make their own decisions; and to them, who would inherit planets, the internecine wars of some minor planet by the name of earth might be utterly unimportant.

Beside him, Jean Crane grinned.

On the floor of the cabin, the fat-legged boy-child tumbled. The acceleration puzzled him. He couldn't quite make it out. But he was trying. He tumbled clear across the cabin and got up laughing, to try again, making his adjustment to the new life that was just beginning.

Sam Jones felt the G's hit him. They were a mighty force lifting him to some last refuge that was not just for the night

-but was forever.

"We've lost a continent—and won the stars," he whispered. It seemed a good bargain.

# THE CHALLENGE

With the conviction growing in him that trouble was dead ahead but without being able to put his finger on its source, Sam McArdle returned to the ship. He had gone out to the inhabitants of this planet as an ambassador of good will, a not unimportant mission in view of the fact that the Lyrane III had landed in the exact center of a huge park in the middle of their largest city but also in view of the fact that the ship would certainly be laid up here until the screen generators could be repaired. Until she was repaired, the Lyrane III would be somewhat at the mercy of the Congers. McArdle tried to imagine the meaning of mercy to them, an effort which left him with considerable heaviness in his mind.

In the control room, Ed Vetch, his executive officer and

second in command, said, "Well, what about it?"

McArdle eased himself into a chair and shook his head. "I don't like it," he said.

Vetch lifted an eyebrow. "Unfriendly?"

"Un-reacting," Sam answered.

"Huh?"

"They just don't react," Sam explained. "They're not friendly, nor are they unfriendly." He twisted uncomfortably in his chair, seeking the reason for this attitude on the part of the Conger race, spoke what seemed to him to be the astonishing truth. "They weren't even surprised when we landed."

"Huh?" Vetch was astonished too. "Then space travel is an

old story to them."

"Nope," Sam said. "This is the first space ship they have ever seen and we are the first inhabitants of any other world who have ever landed here." He looked out through the view port to make certain again that the *Lyrane III* was not surrounded by an excited mob of exceedingly curious people come to see this marvel, a ship from another world. There wasn't a soul out there in the park.

"My gosh, what's wrong with 'em?" Ed Veatch breathed.

"That's what worries me," Sam answered.

"Maybe they're just morons," Veatch suggested, but with no real conviction in his voice.

Sam nodded toward the view port. Out there, beyond the vast park in which the ship had come to rest, was a magnificent city. Tier on tier, it floated away into the thin air of this planet, the product of a swarming race whose technology in many respects was equal to or better than the technology of earth.

Sam had seen the people too. In many respects, they duplicated the human race. Except that they weren't curious. Art, they had, and an appreciation of beauty which was revealed in the sparkling lakes, the winding walks, the flowered paths of this park, and in an even greater degree in the architecture of the city itself. The people who had constructed this city were not morons.

"Maybe the present bunch came along later, conquered the city builders, and took over," Vetch said.

"No. They built the city. From what I gathered, there is no conquering or being conquered here."

"Uh?" Vetch said. "It almost sounds like heaven."

"Almost," Sam McArdle answered. He was silent, thinking. Back on the Earth from which they came, conquering and being conquered were largely gone too. Except for a few primitive regions where native tribes still made sporadic raids for women or cattle, following a culture pattern that was slowly dying out, the day of the conqueror was gone. Once with his legions and his blitzes and his techniques of economic penetration, he had strutted across the surface of the earth. But no longer.

Earth was peaceful now, a minor, not-worth-fighting-for pawn in a bigger game. The conqueror had not disappeared, he had just grown bigger. His ambition included solar systems, the star cluster off yonder. Knowing something of the destruction, the pain, the denial of decent living, the denial of life itself, that went along with the conqueror, McArdle thought longingly of a world where there was no conquering or being conquered. He twisted, uncomfortable and uneasy, and looked up into the bright eyes of Vetch.

"There's something wrong with peace," he said.

"Such as?"

"Such as a nervous system that has evolved within the framework of a way of life that included the challenge and the response, the conqueror and the conquered. Take out the challenge and you have taken out the steam that makes the human jigger go. There's something wrong here on this world, something that I don't understand, and maybe don't like." His voice trailed into uneasy silence as he sought a definition for what was wrong.

"Such as?" Vetch said encouragingly. Like a reflex gesture echoing the uneasiness within him, Sam McArdle shrugged expressive shoulders. "Such as I don't know," he said. "But I do know one thing that I want to get this crate away from here. Put every man to work repairing the screen generators

and plugging up that hole in the nose."

"Right," Vetch said. Operating within the framework of a discipline that approached the ultimate in avoiding frictional losses resulting from a clash of personalities, the executive officer moved quietly to obey his orders, leaving the captain alone. The officers and the crew of this ship had been so carefully picked, so carefully fitted together into a matrix, that discipline was not needed.

Sam McArdle was technically Captain McArdle, but there wasn't a man on the ship who didn't call him Sam and didn't obey him utterly. If in the background the ghosts of ancient surface navies shook their heads at calling the captain by his first name, swearing that such familiarity would breed contempt and result in a loss of discipline, this ghostly gnashing of teeth did not in the least disturb the functioning of the personnel of the *Lyrane III*.

Nor had the sharp but short spurt of fighting between this wandering scout vessel and its equivalent from the conqueror now trying to establish himself within the system of Messier 33 disturbed the functioning of the crew. A part of a much vaster navy, their mission was to scout, to fight if necessary. The first they did with aplomb, the second within the limits of their supply of ammo. If hurt, they crawled up somewhere to lick their wounds into shape for flight back to the nearest base. If killed—well, death was nature's greatest invention, wasn't it? And the fight against it was life's greatest and most interesting gamble.

Coming from the nose of the ship, Sam McArdle was aware of bumps and pounding sounds. He didn't like to repair that hole in sight of the inhabitants of this planet—such a repair was an admission that the ship was not spaceworthy—but the hole itself was also such an admission and he could see no way he could hide the hole from anybody who wanted

to look. The catch was, nobody wanted to look.

Turning to the port, he saw that the ship had at last gained one curious onlooker. But this one wasn't very curious. All he did was squat in the shade of a tree and stare at the activity going on before him. McArdle let his mind run back over his conference with the Congers.

When he had descended from the ship, three natives had been waiting for him, patiently, as if he were a train running a little behind schedule. They had made signs to him that they were friendly and he had made signs back. Communication had posed no problems. The three Congers had brought two gadgets with them, one a little black box which they consulted constantly but which they did not let him examine, the second a device that made telepathy possible.

He had been fascinated with the telepathy gadget and the three Congers had patiently waited for his enthusiasm to wear off—like adults waiting for a child to tire of a new toy, he had thought. They had brought the telepathy gadget with them as if they had anticipated it would be needed, which had made him a little uneasy. So far as he could tell, they anticipated too damned much.

They had conducted him directly to Mr. Big himself, Valdar, or something like that, had been Mr. Big's name. Valdar had received him graciously and again he had had the impression that he was running right on schedule. He had intended to ask permission to land but this permission had been given before it was asked, leaving him with the feeling that Mr. Big had known what he was going to ask. The entire interview had proceeded with ceremonious dullness and he had gotten the impression that he and Valdar were actors reading a prepared script. As he talked with the human, Valdar had constantly consulted a small black box into which was built some sort of a screen.

The landing of the Lyrane III, marking a new age, with space travel now possible, space commerce, and new ideas by the gross, should have impressed Mr. Big, Sam had thought. But Mr. Big hadn't been impressed. He had been bored. The pages and servants around the throne had been bored. Every man on the whole blasted planet had probably been bored.

To Sam McArdle, this had been galling. Hatred of a stranger, distrust, an effort to kill him, he could have understood, but boredom never. Didn't they understand he had come from a world far out in space?

Yes, they understood it well enough. Valdar had yawned. Sam McArdle had come back to the ship with a feeling of acute discomfort.

Looking from the port, he saw the little Conger still squatting under his tree. Like all the others, he was consulting a little black box, and like them he was apparently bored stiff.

Behind him, the door opened. Vetch entered. "They're setting up scaffolding now," the exec reported. "The best guess is that maybe the job will be done in seventy-two hours. Here is what has to be done." McArdle listened patiently, then stopped listening as a junior officer began shouting in the passageway outside. "Ed! Ed! Where are you?"

Ed Vetch jumped to open the door. "Here What's up." "Trouble. We were setting up the scaffolding. Something

slipped, I don't know what, and the scaffold fell."

"Then set it up again," Vetch said.

"Sure." The junior hesitated. "The trouble is—it fell right on top of a native."

"Huh?"

"He's deader'n a fish."

"Come on, Ed," Sam McArdle said. They went on the double.

The scaffolding was tubular steel. In normal use, the bars were used as hand-holds on the walls of the ship, but they had been designed so that in an emergency, they could be screwed out of place and used to construct a scaffold. The scaffold had gone up about twenty feet, then had fallen. The men working on it had jumped to safety. Under it, his skull crushed, was the native that Sam had seen sitting under a tree. Five crewmen of the *Lyrane III* were clustered around him. No one else was in sight. Under him, as crushed as his skull, lay the little black box he had been studying.

"We thought we had it anchored all right but the ground turned out to be soft and one of the legs sank," a crew-

man reported.

"Uh-huh," Sam said. "How'd he happen to be under it when it fell? The last I saw of him, he was sitting under a tree."

"The last time I noticed him, he was sitting there too," the crewman answered. "But just before the scaffold fell, he got up and walked over here. As it started to fall, he started to run—straight toward it."

Sam stared at the crewman in bewilderment. Then he frowned. "Did you yell at him to get away?" he asked.

"I nearly screamed my lungs out."

"Did he hear you?"

"He didn't want to hear me. He saw the scaffolding falling, he ran under it, stopped, and looked up at it as it fell on top of him." "Jumping jeepers!" Ed Vetch breathed. "What was he

trying to do-commit suicide?"

"That's apparently what he did," Sam McArdle said. Irritation rose in him. Whether the native had died by accident, intention, or as a result of some obscure motivation that no human mind might be able to understand, did not alter the fact that he was dead and that some reaction could be expected from his fellows. Sam McArdle did not anticipate that the Congers would pass out medals for the death of one of their fellows. What would the Congers do about it?

"Did anyone see this?" he questioned.

"So far as I know-no," the crewman answered.

"Then carry him into the ship and reset the scaffold," Mc-Ardle decided. "Act as if nothing unusual has happened. If anyone turns up to ask questions, send for me. When the repair job is completed, we'll report to the authorities."

"Okay, Sam." They carried the little native into the ship and out of sight. The scaffold was reset, safely this time, and work was resumed. Three Congers were observed walking leisurely across the park toward the ship.

"It's the same three that met me the first time," McArdle

said.

"Do you suppose-" Vetch said, then was silent.

The three Congers arrived. Dressed in flowing robes, they looked a little like three Greeks from the Age of Pericles. One carried the telepath. The second carried the little black box. The third carried nothing. He bowed. The telepath was adjusted.

"This ship has thirty minutes in which to leave the planet —for good," the third one said.

"What?" McArdle said.

"The ship has thirty minutes in which to leave."

"Huh? I mean-why? We were given permission to land."

"But you were not given permission to cause death."

"Eh?"

"You erected or caused to be erected an unstable struc-

ture which resulted in the death of one Sar Klusion."

"Ah-ha!" Ed Vetch breathed. "They know."

"But-" McArdle said. "It was an accident. We couldn't help it. In effect, he committed suicide."

"There are no accidents," was the calm answer. "All is the result of design. One unwavering purpose flows through every action."

"What?" Sam said. A man by the name of Freud had once held that there were no accidents, that what seemed to be accidental was in reality an expression of the unconscious wish of the individual concerned. Was this what they were trying to say? He tried to explain: "He deliberately ran under the falling scaffold. Our men tried to stop him. We did everything we could." He might as well have been talking to the empty air for all the reactions he got from the three Congers.

"If you are not gone within the allotted time, we will show

you what will happen," they said.

The black box was produced and for the first time he was allowed to examine it. Set within one side was an opaque screen like the screen of a television set. "What is that thing?" he said.

He got no answer. The second Conger bent over the box, tuning it much as a radio set is tuned, to some distant broadcasting station. A picture appeared on the screen, the image of the *Lyrane III* at rest in the park.

"You will now see what will happen," the third Conger

said.

The screen showed the crew of the Lyrane III making hasty preparations for departure. The scaffold was pulled down. The ports were closed. With the hole in the nose still unrepaired, the ship rose hastily into the air. The screen showed it vanishing in the sky overhead.

The image was so nearly perfect that the astonished captain had to steal a hasty side-glance to make certain his ship was still there. Then the screen revealed nothing.

"The ship is now beyond the scope of futusyn," the third

Conger said. "It is gone, forever. Thus you have one choice—to depart. Your second choice is to stay here. Let me show you what will happen if you elect this alternative."

The black box was retuned. Again a picture appeared on the screen, the ship. The Lyrane III remained where she was beyond the time limit allotted for departure. Prepartions for defense were made, but they were futile. The ship was suddenly struck by explosive missiles. Holes appeared in the hull and heavy explosion took place inside. Ed Vetch and several of the crewmen stumbled out, the "exec" apparently wounded. Then the ship was quiet. No movement was visible. On the screen time seemed to telescope itself so that years moved by in the space of a single second. Rust appeared on the hull, in great brown patches, shrubbery grew up around the ship, hiding it.

Ed Vetch whistled softly. Sam McArdle studied the screen with frantic interest. Again the illusion was so real that he had to look toward the ship to make certain it was still there. "Either we leave within thirty minutes—or we never

leave? Is that the idea?"

"That is the choice you have," he was told.

"But supposing I don't like either?"

"You will accept one or the other. What you like is not important."

"Eh? You're sure of that?"

"Very sure."

"But this thing—" He pointed to the black box within which the screen was now blank. "What it is? How does it work?"

He got no answer. Instead the third Conger bowed politely, the second picked up the black box, and the third turned off the telepath. Like actors following a prepared script, they walked away. Sam McArdle and Ed Vetch watched them go. Vetch made a gesture toward the pistol holstered at his hip. McArdle shook his head. Vetch sighed. "We've just had an ultimatum," Vetch said.

"I know. But it doesn't do any good to use a gun on mes-

sengers. Their authority comes from higher up. You've got to get to Mr. Big before you can get anything done."

"But how can we get to him?"

"By being invited. In this case, we haven't been."

"Well?"

Sam shook his head. "We're bucking up against something that is too big for us, something we don't understand. We don't dare tackle it. We're going to take the first choice offered us—to get out of here."

"But the screens?"

"They will either hold until we get to another planet—or
—" He paused, considering the condition of the screen generators and the utter and appalling necessity of these screens
as a protection against meteors in space."

"Or?" Vetch urged.
"Or they won't hold."

"In that case?"

"We'll try to get Mr. Big to invite us to see him," Sam McArdle said.

Well within the allotted time limit, the Lyrane III lifted from the surface of this strange planet. She went easily and safely through the atmosphere, the hole carefully blocked off behind air-tight doors. When she reached the limits of the atmosphere, and lost the protection of that air blanket, the screen generators came on. They wailed softly and Sam McArdle and every member of the crew held their collective breaths. The planet was a dwindling globe far below them when the generators blew and all over the ship, alarm bells began ringing. There was no going on.

"Prepare to issue a calling card formally requesting an audience with Mr. Big," Sam McArdle said, grimly. . . .

In the throne room of the Conger race, Valdar sat staring at the dual screen in front of him. It was divided neatly into two sections. One section revealed the projection from futusyn, the other section revealed the reality as it was gathered by scanning equipment. On both screens the strange ship from some other world was visible. On both screens it was disappearing into the space above the planet. While he watched, it disappeared from both screens. He turned the knob that accelerated the time rate on the futusyn screen.

The screen remained blank. The ship, then, would not

return.

Valdar sighed. He began again considering the importance of the date 3731, the ninth month, the third day, at three hours and twenty minutes past sunset, in the time reckoning scheme of the Conger race, and what would happen then, and he considered setting the equipment so that again he could watch it happen, then decided against it. No, he did not wish to see it again. He was sick and tired of that date 3731. In the bottom of his soul, he wished he had never heard of it.

He stared at the dual screens. Every home on the planet had such a system, both screens working from the vast control dome here n this city. In addition, each individual usually had one of the small black boxes with the single screen attuned to futusyn only. The net effect of the total system was to control the life of every inhabitant of the planet.

When futusyn had been invented and put into use, it was hailed as the ultimate achievement of Conger science. And it had seemed to be exactly that, for a time. Certainly, by revealing the choices open to every individual, and the consequences of these choices, it had achieved complete stability in the social structure. There was a price, of course, for their achievement. In the dark depths of his mind, Valdar was finding that price excessive. Suddenly he sat up, staring with pop-eyed horror at the radar screen that was reporting reality.

On that screen, the ship had reappeared.

On the futusyn screen-nothing.

If the ship was back, futusyn was no longer to be trusted. Futusyn had plainly said it would not come back. At the thought, Valdar's mind began to turn frantic somersaults.

For the first time since futusyn had been perfected, Valdar yelled for his councilors.

They came running. Mutely he pointed at the two screens.

The scientists on his staff looked and looked again and said in effect what the blazes made here? The philosophers looked and looked again and said this was not possible. The generals looked and looked again and said this was an optical illusion, that either the scanning equipment was defective or it was picking up some unusual object that looked like a ship, but obviously wasn't.

As though trying to avoid possible attack, the object that looked like a ship moved with lightning speed. From it, a small object was observed to detach itself and to follow a guided course down toward the surface of the planet.

"Can that be a bomb?" an appalled scientist asked.

"It only looks like a bomb," a general answered. "It is actually nothing; some strange configuration of light rays."

This strange configuration of light rays hit the surface of the planet. A huge mushroom of white flame spouted upward. Followed a roar that seemed to shake the foundations of the planet. The ground rolled in waves. In the immediate vicinity where it struck was tremendous destruction. Luckily—or was this design?—it struck in an unpopulated area, a region that futusyn had said would one day be devoted to the building of a gigantic amphitheater. It constructed part of that amphitheater—the hole in the ground part.

In front of Valdar and his councilors both screens went blank as the blast jarred sensitive equipment out of operation. As sweating technicians, suddenly called to a task that had not been anticipated for them, hastily repaired the radar equipment, Valdar and his councilors waited. When the equipment had been repaired and they saw the hole in the ground, horror appeared on their faces. Such titanic destruction as this they had never witnessed. Nor had they ever anticipated witnessing it. Hence—horror. Then a little by a little horror began to go away.

Valdar felt flow through him such a release of tension as

he had never known in his life. From some hidden well within him, new energy seemed to surge in waves. In the tense room somebody whispered. "Some new, some completely unpredictable factor must have entered the equations."

"Wonderful," Valdar said.

At first, they thought he had gone mad. Then as they realized what he meant, smiles began to appear around the room. From somewhere off in the distance there came a roar. The aroused populace had seen what had happened and were taking such immediate action as seemed advisable. A signal aide hurried into the room. "The ship, Sire, is trying to communicate with you."

"Good," Valdar answered. "What do they want?"

The aide was embarrassed. Such language, such thoughts as he had heard from the ships were unbecoming in the presence of Mr. Big. But it was his duty to report exactly. "They asked, Sire, if we are willing to sit still and let them repair their screens, or do we want another dose of the same medicine?"

Valdar permitted a grin to appear on his face. "Tell them," he answered, "that we will be very happy to sit still."

Outside the palace the roar grew louder. Moving to the window Valdar saw thousands of people fighting each other to get into a huge domed building across the way. An hour earlier this sight would have filled him with horror. Now he observed it with equanimity, even with satisfaction. . . .

Sweating, Sam McArdle set the ship down in the same spot it had occupied before. He turned to face Ed Vetch. "Round two goes to us. I want every man in the ship on the job of repairing the generators."

"You bet," Vetch said. He issued the necessary orders, then turned to his chief. "Scared of round three, Sam?"

"I don't want there to be any round three," McArdle answered. "We're out of calling cards, you know."

"I know," Ed Vetch said.

The crew of the Lyrane III were busier than the bees from

forty hives when the deputation arrived from the Conger people. "The Big Shot himself," the lookout reported.

"Answering our invitation," Sam said. "Let's go talk." Valdar, his councilors and his aides waited outside the ship for the humans to put in an appearance, Sam and Ed took their time. They put on their best uniforms, digging gold braid from long unused lockers. They armed themselves. As if they were in no hurry whatsoever and no importance of any kind could attach to this meeting, they strolled down to meet Mr. Big and his boys.

Mr. Big was smiling. So were the boys. Off somewhere in the city there was a roar as of many voices. Mr. Big was not concerned about this roar. Nor was Captain McArdle and Executive Officer Vetch.

"We are pleased to co-operate with you in every possible way," Valdar said. "We will supply technical help, materials, anything you wish."

"That's nice," Captain McArdle said.

"Food, supplies, anything you require," Valdar continned.

Captain McArdle nodded as if this was just exactly what he had expected.

"In addition, as soon as it may be convenient, we also wish to establish regular commerce with your race."

"Granted," Captain McArdle said. There was sweat on his face. He wished he could wipe it away but decided against trying. This full, complete cooperation worried him more than defiance. Were these jokers leading him on? Did they know the real condition of the ship? Where were their little black boxes that knew everything?

"We also wish-ah-to express our gratitude for the-ahexplosion," Valdar continued.

At the question, Captain McArdle instantly became Sam again. "Huh? Gratitude? What do you mean?" He caught himself and tried to force himself back again into the character of Captain McArdle. It was a character transformation he could not quite manage. "I don't understand this. A little while ago you were giving us choices. Now you are express-

ing your gratitude. What makes here?"

Valdar told him about futusyn. If anything, his astonishment grew greater. "Do you mean to tell me you have developed a method of forecasting the future?"

"I do mean that," Valdar answered.

"And that right down to the last final detail of a man's life,

you can tell what is going to happen to him."

"Yes. Futusyn synthesized the various factors operating on him, combined them with his total personality, indicated the various choices he had, and the results of each. When your ship landed here, it forecast that one individual would be killed in an accident, and that as a result of this accident, you would be forced to depart, never to return."

"This Sar Klusion who got under the scaffold, he knew it

was going to fall?"

"He did."

"Then why didn't he get out of the way?"

"Because he couldn't, Valdar explained, "That was the

way it was intended to be. He couldn't stop it."

"Nonsense," Sam gasped. "You haven't been forecasting the future of your people, you've been hypnotizing them!" He broke off quickly. To him, unconscious hypnosis seemed a more rational explanation than forecasting the future, but was this the right theory? After all, futusyn had said the ship would leave, and it had left! It had come back of course, but he remembered only too clearly why and how that decision had been made. He stared at Valdar. Mr. Big was looking mightly pleased. "I don't get it," Sam said. "You look too happy about this."

"I am happy," Valdar said. "Futusyn has put a curse on us. It has forecast every action of our lives, including the day we would each die. In my case that day occurs in Thirty-Seven-Thirty-One—" Hastily he changed the tense, "It was

scheduled to occur in Thirty-Seven-Thirty-One."

"Was scheduled?" Sam whispered.

Valdar jerked a thumb over his shoulder toward the roar

that was still coming from the city. "It won't do any more forecasting," he said. "When it was proved wrong once, my people seemed to feel they should take matters into their own hands. They're over there now destroying the machines. From the sound, I judge—" Valdar groped for a strange thought impulse to express what he felt, groped and found it. "I judge they're having a mighty good time doing it."

From ear to ear, Mr Big grinned. From ear to ear, the councilors with him grinned. From them an incubus had been lifted. Now they would no longer know what choice they had every minute of their lives. To them was restored—the

challenge of the next moment.

Sam McArdle stared at them. He would have liked to have seen those marvelous machines that made futusyn operate, whether they actually forecast the future or hypnotized their users into that belief did not matter. They would have been well worth study. On second thought, however, he decided this was a privilege he would well afford to forego. "Very well," he snapped, again in the character of Captain McArdle. "Your requests are granted. The audience is ended." Still grinning, Valdar and his councilors walked away.

Back inside the ship, Sam McArdle faced Ed Vetch. "I gather," Vetch said slowly, "that this futusyn was some kind of a mechanical and mathematical brain that took into account all known factors, made allowance for the unknown factors, synthesized the result, and forecast the future."

Sam nodded.

"And when it failed, it made everybody happy, including us?"

"Including definitely me," Sam said.

"But the thing I want to know," Vetch continued, "is what it would have forecast if certain unknown factors had been available to it?"

"Such as?"

"Such as the factor of the collapse of our screen generators and the factor that without screens, we could not cross space?" "I don't know," Sam answered.

"And what would it have forecast if it had had available the information that we had only one atomic projectile left over after our last fight, that when we had shot off our big stick, we were capable of no further offensive action."

stick, we were capable of no further offensive action."

"I don't know that either," Sam answered. "I don't want to know it. Shut up now and let me rest." He sighed. Remembering the look of gratitude on Valdar's face, an expression which had indicated that an intolerable burden had finally been lifted, he knew there was one thing he did not want to know—the future.

Let the next moment bring on its challengel That way a man stayed alive.

# THE WEAPON

## FOREWORD

THE LAST WAR that involved the entire world ended in 1980. Fought with crude but terribly devastating atomic power weapons, it is estimated that over fifty per cent of the world's inhabitants died in this seven-year long conflict. The war was ended by the invention of a weapon so powerful that further fighting was unthinkable. The World State, which had its beginnings in other earlier conflicts, was organized immediately after the termination of hostilities. Headquarters of the new world-wide state established in World City, which was constructed on a high plateau in the Rocky Mountains near the ruins of the old city of Denver, Colorado. The first act of the new government was to outlaw forever the use of the weapon that had brought about the end of the conflict. All plans for the construction of the weapon were destroyed at the same time and all written records dealing with the weapon were carefully sought out and burned.

Excerpt from the Centennial Edition of the History of the

World, revised and published by J. Markwort and Sons in 2500 A.D.

### CHAPTER 1

"OUR COMMANDER has ordered target practice," the Halvar lieutenant assigned to the official party said, with mock

politeness. "Would the humans care to watch?"

Sitting on a table in the middle of the spacious cabin was a telepath, an instrument designed to facilitate communications directly between the minds of two or more people. On Earth, in the year 2505, the telepath was already centuries old, but its use, except by physicians or scientists, or by special authority of the president of the World State, was strictly forbidden on the grounds that a man's thoughts were his own. Life imprisonment was the usual penalty imposed on a person who dared to use the telepath to invade the private life of another individual. Harsh penalties were necessary in view of the fact that models small enough to fit inside an ordinary cap could be constructed. Without the legal ban on the instrument, no one would ever know when another person was reading his mind to his possible disadvantage.

The telepath sitting on the table in the cabin of the Halvar cruiser was strictly legal and its use had been authorized by no less a person than Randall Whitcomb, President of the World State. Its use was necessary. There was no other way to communicate satisfactorily with the Halvar, presuming communications with that brawling race could ever be on a

satisfactory basis.

The Halvar lieutenant's thoughts filtered through the telepath, reached the minds of the group in the cabin, reached the mind of Clay Dorn.

"No," Clay Dorn grunted.

"What?" the startled lieutenant said. "But that's the reason vou came."

"Is it?" Dorn was on his feet. "Is it, Lieutenant? I thought

the reason we came was because your commander-in-chief invited the World State to send representatives along on this trip merely for scientific observation. Nothing was said about target practice—"

Dorn was elated. He glanced across the room to where Jack Young was standing. Young's face was pale and tense because of the risk he was running but the intentness behind

his pallor showed he wasn't missing anything.

Young was wearing a hidden and completely illegal telepath. It was his job to probe the mind of this Halvar lieutenant, or of any other member of the Halvar race that gave him an opportunity. It was Clay Dorn's job to start an argument, any kind of any argument, and make it as loud as possible, so Young would have a chance to read the mind of a Halvar when, startled by an argument, he had his guard down.

"Nothing whatsoever was said about target practice," Dorn repeated. "What is this target practice you're talking about?"

He started across the cabin toward the Halvar.

The lieutenant was startled, amazed, incredulous. He stared at Dorn as if he did not believe his eyes. In the month that had passed since the space ships of the Halvar had first appeared in the skies of earth, no human had challenged a member of his race. It was his personal opinion that no human would ever issue such a challenge. Here was a man, a man whose lithe six feet of height were a good two feet under his towering bulk, starting toward himl

"What's the meaning of this?" he snapped.

"That's what I want to know!" Dorn answered. "That's what everyone on earth wants to know. The Halvar come across space, from the direction of Sirius, with two monstrous space ships, twelve cruisers, and how many fast scouting vessels I don't begin to guess. You come to a world that has been at peace for almost 600 years, a world that has outlawed war, that has forbidden armed conflict, and you bring a fleet big enough to blow our planet out of the Solar System. What I want to know, Lieutenant, what everyone on earth wants to know, is your meaning, your purpose—"

"Silencel" a harsh voice grated in Dorn's ear. It was General Horton, Chief of Staff of the World State Military Forces, who had spoken. General Horton's face was purple with exploding wrath. "You are insulting our hosts. The Halvar have said they come in peace-"

"They're hiding their true motives!" Dorn instantly retorted. "The whole blasted bunch of them are psychopathic liars if I ever saw one. If you believe their story that they're on an expedition of scientific exploration, you're falling for a lot of hot air. Every man and woman alive on earth will have to pay for your mistake."

The purple hue deepened on Horton's thick-jowled face.

"Shut up!" he roared.

Clay Dorn had his argument. It had come from a source he had not anticipated but the source didn't make any difference. He stole a glance at the Halvar lieutenant. The lieutenant was pop-eyed with amazement. In his world strict discipline prevailed and arguments were not possible.

"I am employed by the Department of Public Information," Clay Dorn said icily. "No general on the face of the earth can tell me what to do. You may be a little tin god in the Department of Peace but you don't mean the snap of a

finger to me."

General Horton looked like he was on the verge of apoplexy. "You-you-" he rasped.
"You what?" Dorn egged him on.

"Please, Mr. Dorn," another voice spoke. "Remember General Horton is in charge of our party and is technically responsible for us. I quite appreciate your feelings but this is scarcely the time or the place to give expression to them."

It was gray-haired Samuel Morton, Minister of the Department of Scientific Discovery, who had spoken. Morton was a man Dorn deeply admired and respected. It would not be good policy to affront Morton. And anyhow he had created his argument. Young had had his opportunity to read the mind of the Halvar lieutenant.

"I apologize for losing my temper," Dorn said, bowing stiff-

ly to General Horton. He turned to the Halvar lientenant. "I withdraw my objections to your target practice."

The lieutenant grinned. He flicked a switch. On the front bulkhead of the big cabin, a visascreen puffed with light, revealing a view of the northern part of the moon. The cruiser in which they were travelling was now directly above earth's satellite.

Clay Dorn apparently gave his complete attention to the scene revealed on the screen. In reality the view of the moon interested him very little. What he wanted to do was to talk to Jack Young, to find out what Young had discovered on his hidden telepath. He edged closer to Young.

"Well?" he whispered.

Jack Young shook his head. The telepath was hidden out of sight in the inside pocket and the lining of his tunic. "I didn't get a thing," he answered.

"What?"

"Nothing but fear."

"Fear?"

"Yes, fear. The lieutenant is one of the most frightened creatures that ever drew breath. I know he's acting brazen and nonchalant but actually he is frightened half to death. His fear is so great it's blocking his mind."

"What's he scared of?"

"Of his superior officer and his job. He has strict orders to let nothing slip, to reveal nothing, and he's afraid he may tip us off to something he's hiding. I gather his immediate superior will skin him alive and dump his carcass out the lock if he lets anything slip. But mostly he's scared of that telepath in the middle of the room."

"Scared of the telepath? Why?"

"Because he doesn't understand it. He's afraid we may use it to read his mind and discover something he is trying to hide."

Young's shaky whisper faded out, then came again. "That's all I got, Clay. Fear, fear, and more fear. But I didn't get a single thought that revealed the real plans of the Halvar."

Under his breath, Clay Dorn swore bitterly. He had relied on Young's hidden telepath to disclose the intentions of this brawling race that had come roaring across space and had found a world that almost 600 years of peace had left totally unprotected. The telepath had failed.

On the visascreen on the front bulkhead was revealed the Mare Imbrium, called the "Sea of Showers" by the ancient astronomers who had given it a name. The human race had long since learned that this was not a sea and no showers ever fell there but the name was retained. The Mare Imbrium was almost directly under the rapidly moving ship. The craters of Eratosthenes and Copernicus were plainly visible. The range of rugged mountains known as the Lunar Apennines lav off to the left.

The men gathered in the cabin watched the scene with fervid interest. Although human-built rocket ships had first landed on the moon in 1990, with large mining operations developed since that date, the trip to the moon was a journey that few people ever made. Probably no one present, with the possible exception of some of the reporters representing the news and telecast companies, had ever been to the moon before. Certainly none of them had ever gone there in a beryl steel cruiser powered by an unknown drive that hurled the cruiser's thousands of tons of mass through space under perfect control and at a speed that could be lifted close-or possibly beyond-the speed of light. Rocket ships earth had, cargo carriers to reach the moon, but no rocket ship came within miles of the mechanical and electrical perfection of this Halvar cruiser.

Hurtling high above the surface of the moon, she was a ship fit to fly the space-ways, a ship such as the engineers and scientists of the human race had dreamed of building, and would one day build, if they had the time to carry their development far enough. Time was needed to build a ship like this, time to discover the natural laws embodied in her. time to discover the hidden natural secrets that made her operation possible. Time measured not in centuries but in thousands of years, with peaceful generation following peaceful generation and building on knowledge gained by the generation preceding it. Time—work—the labor of many men.

The question that burdened Clay Dorn's mind, burdened the mind of every other thinking human, was whether or not there would be any more time, now that the Halvar had come.

Somewhere in the great cruiser a gong sounded. "Action stations," the Halvar lieutenant explained. Target practice was about to start.

#### CHAPTER II

THE GONG sounded again. Struck twice this time, there was something compelling, something commanding in the deep tones that rolled through the ship.

"Signal to start firing," the lieutenant said.

The cruiser was ten, possibly fifteen miles above the surface of the moon. Directly below, the crater of Copernicus was clearly visible. A beam of intense jet-white light lanced from the nose of the vessel. It struck dead in the center of the crater. As if an atomic bomb had exploded there, dust boiled upward in a huge, mushrooming cloud.

A gasp went up from the group of men gathered in the cabin. Probably no one of them, including General Horton, knew perfect shooting when they saw it but this was perfect shooting. The crater was an obvious target and the beam

had struck dead in the center.

The beam winked out, winked on again, flicking downward like the tongue of some incredible snake striking toward the moon. The cruiser was moving, no one knew how fast, but the speed of the ship must have been thousands of miles per hour.

In spite of the speed, and the intricate mechanism necessary to compensate for it, the beam struck dead center on its target. With the rapidity of machine-gun fire, the beam winked on and off. Not a flash missed.

Somewhere in this cruiser were almost perfectly trained gun crews.

The beam winked off.

Up from the south, moving so fast they were scarcely visible, came three scout ships. They looked like little black gnats. They dived straight into the path of the beam from the cruiser.

Clay Dorn held his breath. If those three little fliers got into the line of fire!

They didn't get into the line of fire from the cruiser because the bigger vessel stopped the operation of the beam. The little fliers flashed over the crater, jabbed down with tongues of flame, jabbed and were gone.

A split second after they were gone, the cruiser fired

again, then ceased. Dorn saw why it ceased.

Following the three little fliers were two cruisers. They flashed in, poured their fire into the crater, and were gone. Instantly, the split second the line of fire was clear, the cruiser began to fire again.

It was a demonstration of split-second fire control that

was letter-perfect.

Two little fliers flashed in from another direction. Again the cruiser held its fire. Another cruiser followed the scout ship, flashed under the eyes of the watchers, and was gone.

Then, in a mad dance almost too fast for the eye to follow, scout ships and cruisers darted in from all directions. Wherever Dorn looked, a ship was diving down. Not a single one of those flashing beams of light missed its target.

Dorn tried to imagine the plight of gun crews down in the crater and trying to set up a defense against this attack, gun crews trying to fight back. They wouldn't have had a chance. No matter what they tried to do, somebody would have been shooting at them from some direction all the time. They couldn't have gotten their guns trained on a target before the target was gone. Snoring millions of horsepower howled as the cruiser changed direction. It began to circle. Instantly the little fliers and the other cruisers fell into line behind it. They circled the crater of Copernicus, beams drilling downward.

Dust lifted thousands of feet above the surface of the moon. Dust boiled outward, almost obscuring the target. The Halvar ships kept circling. The target began to grow larger.

Under the Halvar attack, a moon crater was being reamed out. A boiling, bubbling cup of lava frothed down there. The crater grew twice as big, three times as big, as it had been before. The bare bones of the moon, the rocky skeleton of earth's satellite, began to show.

Abruptly the gong sounded again.

"Cease fire." The Halvar lieutenant tore his rapt eyes from the visascreen long enough to interpret the signal.

The beams died instantly. The cruiser lifted up and away. The little scout ships raced to get ahead of it and form a protective screen, a shield ahead of the bigger vessel.

The lieutenant flicked a switch. The screen went blank.

"Practice over," he said.

He bowed to the group, walked to the door, left the cabin. The heavy steel door hissed behind him as it automatically swung shut.

A sigh ran around the room. Men closed their straining eyes, looked at each other hastily, hastily looked back at the blank wall where the visascreen had revealed to them the target practice of the Halvar, then hastily looked away again.

The babble of sounds began as the news and telecast men found their voices and started asking questions. Because of their position and background, two men in the group had the best qualifications for answering the type of questions the reporters were asking, Samuel Morton, Minister of the Department of Scientific Discovery, and General Horton, Chief of Staff of the World State Military Forces.

Dorn listened to the questions they were asking Samuel Morton.

"That beam, Dr. Morton-"
"What kind of a ray is it?"

"How does it work?"

"How in the name of heaven do they control it?"

"The energy they must pump into it! How do they focus the energy into so sharp a beam?"

Samuel Morton held up his hand. "Please, gentlemen-"

His face in that moment was as gray as his hair.

The reporters seemed to stop breathing while they waited for an answer. They had never seen a beam like the narrow band of jet-white light that fluted from the Halvar ships. Nor had anyone else on earth. Many men had reasoned that such things might be possible but in a world that ate and slept and breathed peace, no one had tried to make such a beam as a weapon. The reporters waited. Morton cleared his throat.

"I can't answer any of your questions," he said. "I don't know how the beam is generated or how it works. It must be radiated on a sub-ether level. It probably is no more difficult to control than an ordinary searchlight and there probably is not much power flowing over it. It does damage by releasing nuclear energy in the object it strikes. Thus the target of the beam has released a part of the atomic energy of the target. I say probably these things are true, possibly they are, maybe. I don't actually know the first principle involved. No, I can't guess how to construct an apparatus for generating such a beam. Years of research would be needed before even a beginning could be made. No—I'm sorry—What's that? What would be the effect if the Halvar chose to select one of our cities for target practice? Gentlemen, I don't think you need my comment on that!"

The only sound in the cabin was the snoring drone of millions of horsepower building up the speed of the cruiser. The task force was heading back to earth. At the speed with which the Halvar ships moved, earth would be reached in a few hours.

The reporters were questioning General Horton.

"Do we have any defense against the Halvar beam?"
The general cleared his throat. "Defense? Harrump! What defense is necessary?"

"But-"

The general grew pompous. He threw out his chest. It was not often that a spokesman of the Department of Peace had anything to say that interested the newsmen. General Horton intended to take full advantage of this opportunity.

"You may quote me as saying," he said, "that our space neighbors, the Halvar, who are paying our planet a much appreciated visit, have disclosed an ingenious and no doubt effective weapon designed to protect them from possible attack, a necessary weapon, I might add, in view of the fact that their ships cross interstellar space. However, I have seen nothing that need cause any alarm to the peoples of earth. The Halvar are a peaceful race. They have told us so themselves!"

His voice grew more pompous. "As to a possible Halvar attack upon us, that is sheer nonsense. We have been at peace for almost 600 years. Why should war come now?"

"You think, then, that the intentions of the Halvar are

peaceful?" a reporter asked.

"I am convinced of it," General Horton answered. Then he repeated what had become the catchword of the age. "A world at peace need have no fear of warlike neighbors. As to weapons, the human race has the mightiest weapon ever invented—peace."

The news and telecast men wrote furiously, a sight most

gratifying to the general.

"Do you honestly believe what you have said?" Clay Dorn

asked quietly.

General Horton recognized the young man who had previously affronted him. His face began to turn purple. "Of course I believe it," he snapped. "Otherwise I wouldn't have said it."

"All right, all right," Dorn answered wearily. "I have one more question. Have you ever read history?"

"Have I ever read-"

"Forget it. I work for the Department of Public Information. Every man who works for this department has to have an extensive knowledge of history." Dorn paused. "The histories say that the last war on earth ended in 1980, ended because a weapon so powerful was invented that further fighting was unthinkable. What I want to know is this: Do you, as a representative of the Department of Peace, know anything about this weapon?"

"Huh?" General Horton said.

Deeper weariness crept into Clay Dorn's voice. "Nearly 600 years ago the human race invented a tremendously powerful weapon. After it was used to end the war in progress at that time, all plans and models of the weapon were destroyed."

Dorn looked around the cabin. "I don't know but it seems to me that we may soon need such a weapon. I hope that General Horton knows something about it."

"I never heard of such a thing," General Horton said. "A

race that lives in peace possesses the strongest-"

"I know, I know," Dorn said. He turned away. General Horton believed what he said. If he was a pompous, thick-headed fool, this merely meant he was cast in the traditional pattern of generals since men came down out of the trees and began to wear brass buttons. If he reflected the spirit of his times and believed implicitly that because peace had endured for almost 600 years it would endure forever, he could scarcely be blamed. Other men thought the same thing.

"I was reading his mind," Jack Young whispered later.
"He may be Chief of Staff but he never even heard of the weapon that ended the last war in the twentieth century."

"I was afraid of that," Dorn answered. "Tomorrow we'll go see the Secretary of Peace. He is head of the department. He will surely know about the weapon. I can't believe it was entirely discarded." "Then you believe the Halvar intend to attack us?" Young asked.

"I'm convinced of it," Dorn answered.

The Halver cruiser groaned as it roared through space. Dorn's thoughts went ahead of it, to the ship's next stop. Down there somewhere below them was earth, a dream-like green planet spinning in space. He thought of earth. On earth a race had risen to greatness, marching grimly down the centuries, marching always toward some dimly visioned goal that beckoned always up ahead. Up from the beasts this race had come, into savagery, then into barbarism, then into civilization. One by one semi-civilizations had been replaced as standards had risen. Pestilence had stalked this race and famine had waited around every turn of the road it had followed. Wars had raged through it, war after war taking a grim toll. The race had endured. Pestilence had been conquered, famine and hunger were only words in the dictionary, and war was something that existed only in the past, a word mumbled by gray-haired historians doddering in their libraries.

Now the Halvar had come.

Across space, in two gigantic battleships, twelve cruisers, dozens of destroyers, the Halvar had come. The battleships and most of the cruisers had never landed. They stayed far out in space, waiting, watching. Meanwhile the destroyers flew everywhere through the skies of earth, mapping, spying, watching, reporting. When the Halvar knew every foot of the territory of the planet, they put on a demonstration, called it target practice.

"Pure frightfulness," Clay Dorn said. "They show us what they can do. Then they tell us what we are going to do,

or else!"

"We can't fight them," Jack Young answered. "We have no ships to match these cruisers."

"Peace was one of our goals," Dorn said. "We attained it, and thought we had avoided war forever, forgetting that no race can live in peace longer than its neighbor permits." "We did not know the Halvar were our neighbors," Young protested.

"We know it now!" Dorn bitterly answered.

#### CHAPTER III

It was not difficult for two youthful career men to gain an audience with the Secretary of Peace. The Secretary would be glad to see Mr. Dorn and Mr. Young. Pathetically glad. Nobody ever came to see him, except some of his cronies, and they only came to play chess. The Secretary of Industry, the Secretary of the Department of Scientific Discovery, Samuel Morton, the Secretary of the Department of Agriculture—it was almost impossible to see one of these men or even one of their chief assistants. Appointments had to be made months in advance.

Nobody ever had to make an appointment to see the Secretary of Peace. Nothing ever happened in his department. With the passing of this secretary the department was to have been abolished. Or that had been the plan.

Yes, Mr. Dorn and Mr. Young could come in.

Hidden in the inside pocket of Clay Dorn's jacket was the telepath. He intended to use it only as a last resort but use it he would, if the Secretary of Peace refused to divulge the secret they sought.

"Do you honestly believe they plan to attack us?" the astonished Secretary of Peace asked. He was an old man with a head of hair that shone like silver, a lined, kindly face.

"There is no question about it," Dorn answered.

"But I have General Horton's report here. And the newspapers—" The Secretary indicated the papers on his desk.

Clay Dorn had already read the papers. He could see the headline on this one.

GENERAL HORTON SAYS HALVAR ARE PEACEFUL Interesting Trip to Moon "General Horton is a thick-headed fool!" Clay Dorn said. The Secretary almost fell out of his chair at the words.

"My dear sir-" he gasped.

"I'm not blaming General Horton," Dorn spoke quickly. "Probably anyone else in his position would have thought and said the same thing. He is a product of his times and he thinks fighting is impossible."

"But war-" The Secretary fumbled for words. "War is uneconomical, wasteful." It was a damning indictment, was

waste, in this age.

"But the Halvar don't know that," Dorn answered. "They're barbarians. When the human race was in the barbaric stage of its development, the fact that wars were wasteful did not stop the fighting."

"But that was long ago. We know better now."

"We know better but the Halvar don't know better."

"We can teach them," the Secretary suggested.

"The only way to teach a barbarian is to pound your instruction home with a club," Dorn retorted. "That's why we came to you. We're looking for a club."

"A club?"

"A weapon. The weapon." Dorn explained what he meant. The Secretary of Peace stared at him in astonishment. "Now that you mention it, I remember reading about such a weapon—"

"Secret and urgent," a voice coming from the tel-announcer on his desk interrupted. The startled Secretary flicked a switch. Almost instantly a surprised, frightened, almost inarticulate voice flooded the room. It was a voice that the Secretary, Clay Dorn, and Jack Young promptly recognized. Randall Whitcomb, President of the World State, was speaking.

"I am calling a meeting of all secretaries of departments at once. The Halvar have just delivered a demand for metals, food, living space, workers, and an adequate share of all wealth that we possess. They have backed their demand by the threat of total war if we refuse to give them what they

want. Their ultimatum, which I now hold in my hands, expires at noon tomorrow. If we have not accepted their terms by that time, they have threatened to begin the systematic destruction of our cities by means of the beam weapon with which their ships are equipped."

The voice choked. This was a private tel-line, connecting the various secretaries with the president. The choke sounded suspiciously like a sob. Then the voice continued. "A meeting of the secretaries of all departments is requested

at once."

The voice went into silence.

In the office of the Secretary of Peace all life seemed to have ceased at that moment.

"The weapon," Clay Dorn said huskily. "The weapon. Now will you talk?"

The Secretary stared at him. "I-" he whispered. "I-"

Clay Dorn flicked on the telepath. A split second for tuning, for matching thought patterns, then the thoughts of the Secretary of Peace came flooding into his mind.

The Secretary was thinking of weapons. When he thought of weapons, the pictures in his mind was of displays in a museum. The Museum of Peace. There, for the better education of youngsters, all the weapons of the past had been collected for display purposes. The Secretary had seen these things in a museum. That was all he knew about weapons, that was all he knew about war!

About the weapon so powerful it had brought about the

end of war on earth, the Secretary knew absolutely nothing.
"I have to go," the Secretary said. "I have to go. You young men will excuse me. President Whitcomb—"

Like a frightened mouse, he scuttled out of the office.

"There goes the man whose duty is to defend the peace," Clay Dorn bitterly said. "Peace is a fine idea. In the long run it is also the shortest possible cut to world suicide."

"Unless you have the weapons to fight, you're a set-up for the first bully who comes along," Young agreed.

"We had the weapon, once. We let it get away. If we had

it now and if it was as powerful as the old historians thought, we could meet the Halvar on something like even terms. As it is, all we can do is to establish an underground movement-"

"Underground movement?" Jack Young asked, surprised. Clay Dorn knew his history. He explained what an underground movement was. "President Whitcomb will surrender. He has no choice After that will come the underground, the boring from within. Our first goal will be to discover everything about the Halvar weapons. When we know how they build their ships and how they operate that subether beam, then we can begin to build ships of our own in secret. Eventually-but it will take a hundred, maybe two hundred years. If once we let the Halvar land, the grandchildren of our grandchildren will be fighting them."

His voice boiled with helpless anger. "I can't wait that long for freedom. Nor can any man! Jack, we've got to find that weapon. We've got to act now, before the surrender takes

place."

"What on earth can we do?" Young questioned.

"Call all our friends together, start them searching. Somewhere, someplace on this blasted planet there must be a clue, a hint of the weapon our forefathers invented. We've got to find it!"

## CHAPTER IV

THE UNDERGROUND came into existence and held its first meeting before nightfall. It was as fast as that. And as automatic. Oppression, or the threat of oppression, brought a revolutionary group into existence in a culture pattern so automatic as to be almost instinctive. The human race, in the long centuries of peace, had thought it had forgotten revolution but it had merely forgotten oppression. Now that one had come, the other sprang into being.

Seven men formed the first revolutionary group. Friends of Clay Dorn and Jack Young who worked with them in various governmental departments of the World State organization. One of them was a frail looking owlish eyed young man who worked in the research division of the Department of Investigation. There was even one man from the Department of Peace. All of them listened quietly to what Dorn had to say.

"There is or was a weapon in existence powerful enough to stop the Halvar," Dorn concluded. "Our job is to find it. Do any of you know anything whatsoever about it?"

His eves went from man to man in the group. On every face he read the same answer.

"All right," Dorn said. "We've got to have weapons. We'll start at the only source left to us-the weapons on display in the Museum of Peace."

At eight o'clock that night seven men stood outside the great gray stone building called the Museum of Peace. The museum stood on a little hill at the edge of a large park. Stretching away for miles below and around them were the lights of World City. Off to the west the white tipped peaks of the Rocky Mountains were dimly visible in the starlight. Helicopters moved through the air and a great jet-propelled passenger and mail plane from Europe was nosing down to a landing. It would come to rest beside a Halvar destroyer that had supposedly landed to make minor repairs but which was actually waiting to carry the emissaries of President Whitcomb back to the commander of the Halvar expedition. The Halvar commander was waiting in a battleship far beyond the earth's atmosphere, waiting for the reply of the World State government to his ultimatum. He knew what the reply would be: surrender. This rich planet was a plum ripe for the plucking. The Halvar would pluck it and would extend their space empire to include the Solar System.
"I wonder what it will look like tomorrow night?" Jack

Young said, nodding toward the city.

"The council is still debating," Dorn said. "They haven't announced the Halvar demands and the ultimatum accompanying them. The people down there don't know what may

happen tomorrow."

He thought of the shock, the stunned incredulous surprise that would sweep over earth when President Whitcomb stepped before a microphone and made the announcement he would have to make. "When the alternative is surrender or destruction and when we have no means of defense, we must accept surrender." The President would maybe not use those words but that would be the gist of what he had to say. Millions hearing that voice would learn for the first time the meaning of words that had almost dropped out of the dictionary, war and fear and hate, sabotage, intrigue, and the shock of sudden death. By the time resistance could begin to be organized, the Halvar would have the planet in such an iron grip that resistence might well be hopeless. One by one the lights of the cities of earth would go out, possibly to stay out forever.

The seven men entered the Museum. They were looking for weapons. Behind glass-fronted wall panels were displayed all the weapons the human race had ever invented. They were arranged in chronological order. A weapon was displayed in the first panel.

It was a stone. A chunk of rock that a primate might pick up on a hillside and find it fitted into his craggy fist, giving power to a blow. Long before the dawn of history, this weapon had been discovered. A stone. Beside it was a club. Ways to bash out the brains of an enemy.

"I guess we won't use that against the Halvar," the young

man from the Department of Peace said.

The next wall panel showed pointed pieces of bone. They had been fitted into the end of a club, making a better weapon with which to bash out the brains of an enemy.

The next panel showed rough and chipped flints, spear heads, knives. Artists working with plastics had tried to reproduce the man who had chipped and used those flints. He had heavy jaws, a sloping forehead, and great heavy shoulders. He squatted on a hillside and chipped flint, making himself a weapon. With it he extended his control over the forces that threatened to destroy him.

There were many panels dealing with the development of the technique of working flint, with ways to improve a basic weapon. Then came a new weapon. The bow. The human race had used many forms of the bow until the gun came.

Samples of the first guns were displayed in the wall panels, crude bombards that might possibly throw a stone farther than a catapult. The gun had been improved. The panels showed the improvement. Rifled barrels, repeating rifles, machine guns, cannons. The human race had exercised all its ingenuity in devising new and better ways to use gunpowder. There were bombs, high explosive shells, big shells, little shells, shells that exploded on impact, shells that saw their target and went off when they were close enough. Gas shells. Bombs to be dropped from airplanes, little bombs, block-buster bombs. Torpedoes, used against ships. There were flying torpedoes.

The first crude atomic bomb!

"Hiro-shima," Clay Dorn spelled out the words. "First used at Hiroshima."

"We could put an atomic bomb in a rocket ship!" Young said excitedly.

"Yes," Dorn answered, "We could. We will—when we learn how."

The pressure of time was on them. The atomic bomb was a brutal, deadly weapon. It could be used against the Halvar, in time.

With the atomic bomb, the displays went crazy. For the first time in history, the human race had had unlimited power at its disposal, had had a tremendously powerful weapon that was capable of almost unlimited development. How they had developed it! Starting with the destruction of the heavier elements, and the release of energy in the creation of lighter elements, they had learned to snythesize the lighter elements into the heavier ones with an even greater release of energy.

Bombs that weighed four or five pounds. No way to detect them. They could be smuggled into any country. While you were at peace, you hid two or three of these little bombs in each of the main cities of your potential enemies. Then, in case you had to go to war, the first thing you did was to set off the bombs. Your enemy didn't have any cities any more. While he was trying to discover what had happened to him, you moved in with your armies. A few years later, when you thought everything was under control, the underground blew up your cities.

Abruptly the human race stopped living in cities. You never could tell when a city was going to blow up. You

had better live out in the country, in little towns.

"If we could smuggle these bombs into the Halvar ships—" the youth from the Department of Investigation said hesitant-

ly.

"In time, in good time," Dorn said. "But that means war—Unless we blew up all the Halvar ships at once, they would fight back. And remember, in the almost 600 years of peace, we have built cities again. If we left one Halvar ship in the air, it would destroy our cities. All of this—" He was thinking out loud. "All of these displays of atomic energy belong to the last world war. Our forefathers used these weapons. We can use them, in time. But they're not the weapon we're looking for, the weapon that stopped fighting forever—"

"There's one more panel," Young said.

The last panel, the last weapon. Clay Dorn looked at it. Logically the most hideous of all war instruments should be here in this panel, a perfect engine of destruction, a squat black monstrosity, bulging with barrels, a weapon to hurl death beyond the horizon.

No such weapon was on display. The panel contained two objects: a bright metallic headband and a placard.

"There must be some mistake," Dorn heard someone say.
"That headband isn't a weapon, can't be a weapon—"

Dorn scarcely heard the words. He had almost stopped breathing. He was reading the placard The first model of the telepath, called the "Phobitron" by George Jansen, its inventor, because its accentuated and exploited the phobias or fears of the person against whom its radiations were directed. Used as a weapon, it is reputed to be the device that brought about the end—

Clay Dorn's heart was up in his mouth and he was shouting at the top of his voice. "The phobitron! The fear hurler.

Gentlemen, we've got it!"

The six men stared at him. He explained what he meant. The attendants of the Museum of Peace found themselves roughly handled that night when they tried to close up. Seven men said the museum was not going to be closed. When the attendants protested, they found themselves subjected to the indignity of being bound, gagged, and locked up behind one of their own wall panels.

The seven men of the Underground worked like fools all

night long.

## CHAPTER V

THE HALVAR commander and his captains waited in the main cabin of the battle wagon that served as a flagship. Radioed information from his destroyer that had waited at World City advised him that seven men, bearing the reply of the earth government to his ultimatum, were on their way to him.

Helmeted, adorned with medals, each wearing holstered weapons, the commander and his captains waited. Around the huge cabin, set in alcoves, gun crews stood at their weapons. A communications officer with his aids was seated before a radio panel, ready to flash the signal "Commence action" to the rest of the task force, if such a signal was needed. The Halvar knew it wouldn't be needed. There was no sign of resistance from the planet below. The Halvar did not expect resistance. They had the ships, the weapons, the trained fighters, all blue chips in the game of war. The planet below them had nothing.

The sounding of a gong announced the arrival of the men

carrying earth's reply to the ultimatum. Escorted by guards, seven men entered the huge cabin. One of them carried the telepath necessary for communication between the two races. He set it on the small table that was waiting for it. Two men stepped forward to face the Halvar commander. Oddly, they did not walk as should members of a subject race approaching their masters. They did not bow. They didn't even salute. Chins up, shoulders thrown back, they walked like proud men, defiant men.

The Halvar sensed their defiance. Dangerous glints appeared in the eyes of the commander. There was little patience in the Halvar makeup, none at all for defiant inferiors. The Halvar had walked softly when they first arrived on this planet, watching warily for possible traps, probing its defenses. They had learned it was defenseless and the

time was over for softness.

"You bear the reply to the ultimatum from your governing

body?" the Halvar commander asked.

"Yes," Clay Dorn answered. "We bring a reply." He did not add that neither President Whitcomb nor any member of his cabinet knew they were here, that they had stolen uniforms and forged papers of identification before presenting themselves. There had been no time to ask permission, to make long and involved explanations.

"That is good. What does your governing body say?"

"Earth declares for peace," Dorn answered. He did not

say what kind of peace.

"Peace?" Satisfaction appeared on the face of the Halvar commander. "That is good. The metals, food, the living space, and the workers will be turned over to us as we require them?"

Dorn took a deep breath. He slipped a hand into the pocket of his tunic, found the switch of a little instrument nestled there.

"Such metals as we have in surplus, or can produce with your assistance, you may have. Food? All you want. Here no one goes hungry. Living space will be provided in our deserts which can, with enough hard work, be made productive. These things we will permit. About the workers—"

"Permit?" the Halvar commander interrupted icily. "You

will permit us to have these things?"

His eyes, fastened on the two men facing him, were suddenly hot with anger. Dorn knew that the time had come. He glanced around, at the six men with him, then looked again at the commander.

"You space pirates can go straight to hell!" he said.

Unquestionably the Halvar commander did not know the meaning of the phrase "go to hell." He did know the meaning of defiance. He could recognize defiance when he saw it. He saw it now. He leaped from his chair.

"Blast these insolent dogs to dust!" he shouted. "Guns crews: Commence action. Communications officer: Order all ships to commence firing at once and to continue until other-

wise directed. Move."

Dorn grinned at the men with him. "Let her go, boys," he said. "Show them what can be done with a phobitron!"

Emergency gongs sounded as the commander's order roared through the big cabin. Instantly vast engines began to rumble as the waiting engineers cut in full power. The communications officer snapped switches on the panel in front of him, prepared to relay orders to the other Halvar ships. A lieutenant pulled a gun from its holster to blast the seven from earth.

Dorn knew exactly what he had to do. Each of the seven knew exactly what to do. They had spent the whole night learning how, in feverishly building extra models of the strange instrument called the phobitron. Dorn concentrated his attention on the lieutenant who was pulling the gun.

The lieutenant had the gun out. He was moving to get

The lieutenant had the gun out. He was moving to get into a position where the discharge would not endanger his own comrades. He found the position he wanted, brought the gun up, started to glance down the line of the sights.

His eyes stopped at the weapon itself. His gaze became fixed on the gun, concentrated there with terrible intensity.

The gun seemed to hold a horrible fascination for him. A sick loathing overspread his face. The lieutenant first looked horrified, then he looked sick. Something was happening to him. He didn't know what it was. All he knew was that he was suddenly terribly afraid of his own gun.

Ever since he had learned to use a gun, he had been a little afraid of it, afraid of what it might do, afraid it might explode in his hands. Terrible forces were leashed within that cunningly contrived piece of metal and plastic. The lieutenant knew what the forces would do to him if they were suddenly released. Instantly his fear of the gun overwhelmed him.

Like a man who has suddenly discovered he has a piece of red-hot metal in his hands, he threw the gun from his hands. The crash as it hit the floor was a tinkle of sound in what had become a roaring tumult.

Gun crews, in the turrets in the wall, had tried to swing their weapons into action. Like the lieutenant, the gun crews knew the terrible forces leashed within the guns. Suddenly the fear of those forces became a madness in their minds. They shrank away from their weapons, cowered away from them.

Fear walked through the ship, walked with silent but terribly swift feet through the Halvar battleship.

The communications officer was not afraid of the radio transmitter. Not consciously. He knew the danger of the currents that flowed there, but the currents were shielded and would not touch or harm him. Suddenly he had the impression the wires were no longer properly insulated. The currents were about to touch him. He stared at the radio transmitter as if it was some horrible monster that had suddenly appeared before him. His face went white with fear. He jerked himself away from the equipment.

The message he had been ordered to send was never sent. "Where do we go from here?" Young asked.

Dorn had the answer to that too. "There is no greater fear

than the fear of falling. Every creature that flies is afraid it will fall."

"I get it," Young said grimly. "We'll work on that commander."

The Halvar commander was staring at his men. He was all-powerful here, his word was law, unless his men should mutiny against him. He was suddenly aware of the fear that his men would mutiny. The fear held him. A second later an even greater fear came flooding into his mind. The fear had always been there. Now it suddenly grew stronger, became overwhelming in its horror.

What if the ship fell? Inconceivable energies would be released if the ship fell. Everyone in it would be blown into particles finer than dust.

The fear that the ship might fall was a monstrous thing, a hideous exploding torrent of emotion roaring through his mind.

"Land the ship!" the commander screamed. "Descend! We might fall!"

"Order all ships to descend," Clay Dorn said grimly. "They might fall too."

The commander's face was lined with pain. Somewhere in the back of his mind was the realization of the meaning of this order. If the ships were ordered to land—He fought against it.

The fear in his mind grew deeper, blacker. He tore the helmet from his head, his finger nails ripped long red grooves in his scalp as he fought against the horror raging in his brain. He tore his tunic off, fought for air with great gasping sobs. As he fought new fears crowded in around him. He was not only afraid the ship would fall, he was afraid he wouldn't be able to breathe. He was afraid of this and that and everything.

"All-ships-down-" he croaked. His face was not a pretty sight as he crumpled to the floor.

The communications officer found himself able to approach his equipment long enough to obey that order.

The flagship led the way down. The other Halvar vessels followed in regular order. Like slowly falling leaves the ships went down to earth. When the official party bearing the capitulation from the World State reached the landing field to take off to the Halvar commander's flagship, they found it had already landed and was waiting for them.

"All the phobitron does is accentuate your own normal fears," Clay Dorn said, to the grinning news and telecast men. "Everybody is afraid of something. Most of us are afraid of a lot of things. The phobitron increases those fears one to ten thousand times. The person who wears the phobitron directs the radiation against his enemy and the enemy is afraid to attack, afraid to do anything, afraid almost to stay alive. It's the most damnable, horrible, powerful weapon that was ever invented—the turning of a man's own fears against himself. This is the reason it, and the telepath, were outlawed on earth."

"So that's why the Halvar landed?" a reporter asked.

"Yes. If they didn't land, they might fall. They were afraid

of falling. We worked on that. Now-"

He was thinking about the Halvar. What could be done with them. The Halvar unquestionably had much to give the human race. The space drive, the secret of these mighty ships. They would give their secrets now, they would be afraid not to give them. The human race would have ships to reach the stars.

"With their ships and our phobitron, we can sail anywhere in the universe," Clay Dorn said grinning. He looked at the six men with him. "Somehow I think we'll be members of the first star ship that takes off from this planet. What do you think, my friends?"

Their grins told him what they thought. Ships and the weapons and the men to sail beyond the farthest star the

clearest night reveals-these the race had.

## THE STUBBORN MEN

THE SOUND was like small glass bells ringing, a thin clear chiming that pulsed with a deep, compelling rhythm, elfin music from fairyland. Contrasting with this dainty chiming, the radiation counter on the wall suddenly began to bark like some ugly but faithful watchdog smelling danger in the night. Jack Danby came to his feet and looked at me, the healthy brown of his face fleeing under a creeping tide of white.

Then he seemed to grasp what was happening. "He lied to me!" he burst out. "This proves it. Gave the staff the night off. Had me ask you down to keep me busy and out of the way. What a man!"

Clean and clear and dainty, the elfin music pulsed with a deep vitality. High notes, clear notes, like the sky is high and clear on October nights. On the wall the watchdog hooted now in crazy fear.

Jack Danby went out of the barracks building on the run, heading for the squat structure with the three-foot thick concrete walls, the radiation laboratory. The strange music was coming from the lab and I wondered, as I followed Jack, how the sounds—if they were sounds—were getting through those concrete walls.

The door was lead-lined steel. Jack grabbed the latch. The door was locked. He jerked at it.

"Jim!" he screamed. "Open this door."

The elfin notes, as if in answer, swept up in a ringing flood. The laboratory seemed to vibrate with the sound. It appeared to come from the earth below us, from the stars overhead, from the depths of space between those stars. In the fractional part of a second, it seemed to sweep through the whole of space like lightning flashing from a far-off star, then died as the lightning dies, so swiftly you can hardly realize it has come and gone.

Jack seemed to hold his breath. Inside the door, a lock

clicked softly, and the steel barrier swung open. But no one looked out at us.

"Dead man's control," Jack Danby whispered. "No, Steve, don't follow me," He went in and I followed him.

Jim Anderson was slumped down in front of the control panel. As he fell, his foot had slipped from the floor switch. That had actuated the circuit that shoved in the baffle plates, stopped the pile, and opened the door.

It was the first time I had seen a man who had just died. There was pain on Jim Anderson's face, and peace too, as if at the last moment he had learned a secret that made the pain unimportant.

Jack swore luridly. "We were scheduled to run this test

Monday."

"And you would have been here Monday, in the lab?" I asked.

"Of course." The tone of his voice said this was a silly

question. "The whole staff would have been here."

I didn't ask what had killed Jim Anderson because I knew. A sudden and unexpected flood of radiation. Not gamma, though that is deadly enough, but some other unknown kind that exploded in singing music, and killed instantly. This was an atomic research laboratory. Here stubborn men worked with the atom, trying to learn more of its secrets than Oak Ridge, Los Alamos, and Bikini have revealed.

Looking at the man on the floor, Jack choked, and swallowed. I knew the depth of the respect and affection he had held for Jim Anderson. He turned it out of his mind.

"Something here we don't know about," he said. "Some

new particle, some new radiation. Have to check."

"Jack!" My voice must have been raw along his nerves.

He put his arm around my shoulder. "Steve, will you call Dr. Carson? He'll want to check this too. Here, I'll go with you."

Because the bulked equipment might still be "hot"—might be emitting lethal quantities of invisible radiation—he shooed

me out, brothering me to safety. That's what he was—my brother. Hours later, when I got a chance to talk to him alone, I reminded him of it.

"Danby, you don't have to be the one who runs that check!"

"You don't understand," he answered. "Research, Incorporated has poured millions of dollars into our work."

"Research has all the money it needs. If it wants more, all it has to do is ask somebody, anybody. I am not aware that the Danbys have any more lives than the Andersons."

He sighed. "We need to know, Steve." He gestured toward the northern sky. "When it comes we got to know."

He was talking about an atom bomb.

"But you don't have to run that check. Let somebody else do it."

"I'm chief now, Steve," he said. Then he grinned. "Don't worry so much about it. When I'm in the lab, I know I'm working with something a lot more dangerous than a thousand rattlesnakes. You can be certain I'll be careful."

"Then," I said. "You won't mind if I'm here."

His eyes went into wary alertness, "There's no need, Steve. But—" His shrug was elaborate. "I'll write or call you and have you come down for it."

"And if you should forget to write or call?"

"Me?" He laughed. "I won't forget."

"Promise?"

Irritation crept into his voice. "Okay, it's a promise."

With his promise, I agreed to go back to school. I was in

college, finishing a master's degree.

A week later, he wrote me, saying that a physicist named Hughes had been promoted to his old job of assistant, that it would be several months before they were ready to run another test, and that he was having trouble replacing staff men who had resigned.

The letter announcing the test came in April. Would I take the night train on Friday? The test would be run Saturday morning. Hughes met me at the station. He was a big man with gray eyes and a ready grin. He said he was glad to meet me.

"Where's Jack?" I inquired.

"At the lab, checking the connections. He asked me to pick you up."

As he stopped the car in the laboratory parking lot, I heard

the small glass bells ringing.

"What's that?" Hughes said.

"The sneaking, dirty liar!" I burst out, and leaped from the car.

In the soft April night the concrete lab was a monster rooted deep in the earth. From it came high notes, clear notes, like the sky is high and clear, like atoms ringing tiny glass bells as they fled through a crystal lattice. The elfin music burst in a flood, and stopped, and I knew the dead man's switch had gone into operation.

I carried Jack Danby from the concrete lab to the barracks building where he had lived. Later, Hughes came in, gulping, trying to say something when he knew there was nothing that

could be said.

"Can't understand it," Hughes said. "Thought we had screened those radiations."

"Where's the staff?" I asked.

He looked surprised. "Jack gave them the night off, to celebrate."

"And he sent you to meet me?"

"Yes. Uh. You think he was trying to protect me?"

"Start checking the shielding," I said.

He looked relieved. "Well, that's what I thought ought to be done. Here's a letter I found in the lab. For you." He went out. The note said:

Steve:-

I'm writing this before I run the test check, and if you get to read it, you will know that I was wrong. I want you to promise me something—that you will never do atomic research. There are plenty of other people who can and will do it.

Jack, I thought, do you remember when I used these same arguments on you? Do you remember when I begged you to let somebody else do it? The note continued:

The life of one member of a family is enough, Steve. So promise me you will stay away from the atom.

"Jack," I whispered. "I can promise to stay away from the atom but how can I make it promise to stay away from me?"

Somehow I went back and finished school. Then I went looking for a job. At Research, Inc., they admitted they needed men for a certain project but I was just a kid out of college. The man who interviewed me was quite scornful, and tough. Then I told him who I was.

"Danby? Oh." He looked me over for a long time, repeating "Danby!" half aloud. The way he said it, it sounded

like a prayer. "Our Danby who-"

It's October now, with clear bright nights so peaceful and so quiet you'd think they would remain this way forever. Only you know they won't. Nightly as I go from the concrete lab to the barracks used for living quarters, I look up at the night sky, wondering when it will come. Maybe it won't come. That's a hope. And a prayer.

We think we've found a way to test the pile now, by putting the operator in a shielded remote control lab located

a mile away.

Hughes thinks a mile is safe, but he doesn't know. Nobody knows.

Some day Hughes will find out. Then, if he fails, it will be my turn. I'm stubborn too.

## THE FINAL FRONTIER

LYING ON THE STONE couch the Martian, Elso, opened his eyes and made a gesture in the sign language used in this place, a gesture which said: "Ship coming."

In other circumstances, the human, John Barnett, would have wondered what made Elso think a ship was coming. Now the problem of Elso himself occupied all his mind.

Elso was lying on a stone couch set in a cubicle carved out of solid stone. A candle on the wall gave the only light. There was only one exit from this cubicle—an opening which the Martian stone-masons were swiftly closing.

The tiny room was carved in the solid stone pillar which the Martians call Znakevog and which rises, a lonely sign-post pointing the way to heaven, out of the sand of the Great South Desert. A strange place even to the Martians, and doubly strange to a human; a place of silence, of mystery, perhaps a place of miracles. So, at least, the Martians thought. But Barnett was a competent research man, and to him a "miracle" merely meant that laws as yet unknown were in operation. Some day the laws would be discovered. Then the miracles would be under control and would work for man, would help him chart the long road that he followed to his ultimate destiny.

Here in this place were laws that baffled John Barnett and customs that he did not begin to understand. If he lived a thousand years he would never understand the custom that motivated the final act of the Martian, Elso.

Of his own free will, Elso was permitting himself to be walled up inside this cubicle—to be buried alive—and not only was permitting it but demanding it as his due.

To the human mind such an action was incomprehensible. To the group of ascetics and mystics, the dreamers who lived in the temples surrounding the Pillar of Znakevog, this was the accepted way to die. When the time came—and each Martian determined the right time for himself by some

system that Barnett could not begin to fathom-each entered one of these cubicles, and died there. Barnett had seen the cubicles opened and the dessicated bodies taken from them. But the Martians believed that some part of the body had been translated into another sphere. The body died. The soul stuff went elsewhere. They were vague as to the nature of the soul stuff or where it went but they were very sure it existed.

Barnett would have given his life's blood for the simple sureness of their belief. To him, it was impossible to talk about soul stuff. No camera had ever made a picture of the soul, no scale had weighed it, no eyes had seen it, no instrument had detected it. If it existed, it was the stuff of dreams, the imponderable, and between it and the forces and the magnitudes with which science worked-the measurable, weighable, computable forces of ordinary space-time-there was an uncrossable gap, the gap of chaos. And across this gap no bridge had ever been built except the pathetic bridge of faith

Now the Martian, Elso, was about to set his foot upon that bridge.

Barnett's hands moved in the sign language imposed by the silence of this place. "Elso, are you determined to do this?" Elso was his friend; he would stop this suicide, if he could.

"Of course," Elso's moving hands answered. "It is the time."

"But how do you know it is the time?"

"How do you know when the sun rises?"

"I can see it, I can feel it, I can detect it with instruments. But you cannot see what is going to happen to you."
"I can foresee it," the Martian calmly answered.

Foresee, Barnett thought. Is there a higher form of seeing? He did not know. The legends and the fables of two planets said there was, but he did not know.

"Just as I, in this moment, can foresee the ship that is coming," the Martian continued.

"Ship?" Barnett repeated. "Elso, stop this foolishness. We are doing important research into the nature of the zone. Come back with me to my quarters down below—"

"No, my friend, it is the time to go. I will not delay it." The Martian's hands moved in the sign of parting. "Good-

by-" He closed his eyes.

Barnett felt a light touch on his shoulder and turned to face the second Martian, Gelkid. Gelkid motioned toward the exit. Together they moved out into the corridor, stepping over the wall of stones which was already knee-high. Barnett felt sick with failure as he watched the masons fit the last stones into place.

He and Gelkid moved along the corridor to the round window that opened out a hundred feet above the ground. From this spot they could see the temples surrounding the pillar and the desert stretching far away beyond the zone of silence. He looked through the round window, and blinked

his eyes and looked again.

Down there on the sand, with much blowing of landing

jets, a ship from Earth was coming down.

Barnett cursed the soundlessness of this place which kept him from expressing in words the questions rising in his mind. "Elso said a ship was coming," he gestured. Wonder moved in him. He started down the corridor, determined to open Elso's cubicle and probe this mystery to the bottom.

Gelkid caught his shoulder. The Martian's face was sym-

pathetic but stern. He made the sign of negation.

"But he said a ship was coming. I want to know how—"
"So do I, and so do all of us, my friend. But we will
never find out by disturbing him. Sometimes in the last hour
comes a moment of foresight in which the future is made
clear. It is by this foresight that we know when to enter
the cubicles. It was this way with Elso. Thus he saw the
coming ship. But he does not know how he saw it."

Barnett had run head-on into a wall of belief that he knew he could not break down. But the fact remained—Elso had foreseen the coming of the ship. What else might

Elso have foreseen? And what was the real nature of this Pillar of Znakevog where Martians sometimes caught glimpses of the future and where they allowed themselves to be walled up to die, believing thereby that some part of them would be set free to cross the gap of chaos?

Fear moved through Barnett like a rising wind, grew stronger as he realized the significance to him of that ship landing down there, blowing clouds of dust high into the air in the clumsy, difficult, unnecessary jet landing process.

No Earth ship had landed here in the year he had been in Znakevog. The Martians said that no ship ever landed here; it was one reason he had come to this place. There was a spaceport in the zone of vegetation to the far north, where Luederson's tremendously expensive freight and passenger rockets landed in the sporadic traffic between the two planets.

Luederson? In the year that had passed he had forgotten Luederson. The arrival of this ship could only mean that Luederson had finally traced him here. At the thought, panic struck Barnett. Had Schultz betrayed him to Luederson? Schultz was the only human who know he was hiding here on the Great South Desert of Mars.

He put the thought out of his mind. He would bet his life on the dogged loyalty of that sandy-haired technician, Osmar Schultz. This ship was here by accident, he told himself. Perhaps a scientific expedition—

He watched the ship come down, the pilot doing a neat job of handling a difficult operation. A drive existed that would set this ship down feather-light there in the desert and would lift it up again without disturbing so much as a single grain of dust—a drive that did not function against inertia as did rockets and jets but reached for its toehold into the secret, hidden structure of space itself. The ship down there was not equipped with the drive. Nor was any ship anywhere in the Solar System, yet.

In the airlock men appeared, dropped lightly to the sand against the lesser gravity of Mars, five in all. As if they knew exactly where they were going, they advanced toward the Pillar of Znakevog. The weapons they carried and the alert easy way they handled them were clear. At the sight of the weapons, Barnett knew that this was not a scientific expedition. "But even if they are pirates, they are not after me," he told himself.

The five men struck the edge of the zone and stopped abruptly, like marionettes. Barnett, watching, felt a little sorry for them. They had run up against the zone and they didn't know what it was. As he watched they moved hastily back a few feet, out of the zone, and stared around as if expecting attack. They moved hastily back to the ship—and reappeared with instruments.

Trying to find out what makes the zone, Barnett thought.

It was an effort in which he wished them luck. So far as he knew there was only one instrument, and that one evolved by nature, that revealed the existence of the zone—the ear. No radio receiver he had been able to design, operating over a vast range of frequencies, had revealed the existence of the zone. No photographic plate was fogged by the zone, no electroscope discharged, no cloud chamber unduly disturbed. The zone was invisible to the eye. It was a natural phenomenon generated by some ore or some combination of ores in the Pillar of Znakevog, and it surrounded the Pillar as a circle of complete silence. Within this circle, which had a circumference of approximately three miles—the Pillar itself being half a mile thick and rising the same distance in the air—the ear did not hear.

Sound waves were propagated here. A tape recorder caught them and if taken outside the circle and played back, the recordings could be heard. So the trouble lay within the mechanism of the ear. Although no instrument had detected it, there was present in the zone some subtle radiation—force, pressure, or absence of same—that stopped the functioning of the ear mechanism itself or of the connective tissue transmitting the sensations from the ear to the brain—Barnett didn't know which.

What else was present in the zone of silence?

The Pillar itself, Barnett thought, was probably a meteorite, a space wanderer that had come to rest here on the Martian desert after an infinity of wandering between the stars. Probably, but not certainly. There were times when Barnett found himself wondering if this black basaltic stone which the Martians had honeycombed with passages was actually matter from this continuum. Or had it come from some other space-time? Had it crossed the gap of chaos?

He didn't know, fretfully he feared he would never know. There were limits to his mind; to any mind. If he solved completely the problem of the origin of the Pillar, if he discovered, named, and described mathematically the radiation producing the zone of silence, if he learned how to generate and control that radiation, he suspected the only result would be the opening up of new mysteries. That was the way it worked on Earth, on Mars, and possibly in heaven. Was there no end to it? Or had Elso found that end in the calm acceptance of death, sustained by a faith that to another mind was only a suicidal delusion?

From the consideration of such problems the mind turned back, appalled at the maze confronting it, and sought refuge in the antics of men who had just met the zone for the first time and did not know what to make of it. They set up their instruments and obviously did not believe what their eyes told them. One went back to the ship again, and returned with another man clumping heavily before him.

At the sight of that man Barnett was aware of a strange sensation of constriction, as of tightening veins choking off the return of the blood, somewhere inside him. If there were a person anywhere in the system who could solve the mystery of the zone, this man could do it. The man was Osmer Schultz.

Schultz was also the one man in the System who knew Barnett was here.

Watching the way Schultz moved, the way the thug with him kept him covered with the gun, Barnett knew

Schultz was a prisoner. What he had to do was also obvious now. Panic rising in him again, he made the sign of hiding to Gelkid. Desperation was in the gesture.

"Hide me, Gelkid, until that ship is gone."

There was no time for explanations. Gelkid did not ask for them. When a friend was in trouble, you did not ask what the trouble was, you did what you could to help.

Gelkid led the way.

In a small temple on the opposite side of the Pillar from the ship, behind a door so cleverly concealed that the eye would never detect it, Gelkid hid John Barnett. "You will be safe here," Gelkid said in the sign language. "Once we hid one of our friends here for eleven years. But, to make doubly sure, I will go quickly to the men in the ship. When they ask me about you, I will tell them that no such person has ever been here." Gelkid was gone.

Four hours later he returned, smiling. "They are gone," he said. "The ship just blasted off. You can still see it, if

you hurry, in the far sky,"

"Were they actually searching for me?" Barnett asked, in the sign language. "I was never quite sure."

"They most certainly were," Gelkid answered. "They searched the whole area and left quite disgusted at their failure to find you."

"Thanks, my friend."

"It is nothing," Gelkid answered. "Do not mention it."

Barnett returned to his quarters. He was tired. The arrival of the ship and the search for him had been an emotional strain. Coming on top of Elso's action, it had left him with the drugged feeling of heavy fatigue. Gelkid, sensing his feelings, did not attempt to follow him. Alone, he entered the quiet rooms where he had lived for a year.

Across the room a man sitting on a couch grinned at him over the muzzle of a gun. Three other men sitting quietly against the walls got quickly to their feet. The guns covered

him.

The grinning man got up from the couch. His name,

Barnett remembered, was Fell. He worked for Luederson.

The muzzle of a gun at his back, he was marched from his quarters.

Outside a Martian saw him, gaped at the men following him, ran protestingly toward them. A gun spat flame. There was no sound, but the Martian reeled backward.

Guns here in the zone of silence were new things. There were no weapons here of any kind. These Martians did not believe in weapons; against four armed men they were help-less.

Outside the zone, Fell spoke for the first time, to one of the men who carried a heavy box. "Get that radio going."

The box was swiftly opened. Fell grinned at Barnett. "They made signs indicating no human had ever been here, but we found your quarters and knew they were lying. We figured you were hiding and if the ship left, you would come out. Easier that way than trying to dig you out of that rat-hole." He gestured toward the Pillar of Znakevog.

"I won't go back with youl" Barnett shouted. He tried to

break free. They held him easily.

"Do you want to go quietly or do you want me to tap you on the noggin?" Fell said.

From the temples the Martians were emerging to stare at the strange sight of four humans holding a fifth prisoner. They started forward, to ask questions. Fell raised the automatic weapon he was carrying. When the sharp bursts died away, two Martians were writhing on the sand and the others were fleeing back to the protection of the temples and the Pillar

"That was cold-blooded murder," Barnett said, pale and trembling.

"Well, if it was, the boss thinks you're worth it," Fell answered.

From the box, the radio operator looked up. He was using code, kicking his signals into space from a collapsible antenna less than six inches long. "Got the ship, Fell. They're turning."

"Good," Fell said.

The ship came down in a long slant, blew sand from the desert in a heavy landing, and remained just long enough to load the four members of its crew and their reluctant passenger. When the blast-off acceleration was complete, Barnett was taken into the main cabin. There Luederson was waiting.

Luederson had a great thatch of iron-gray hair above a narrow, avid face. He was very polite. Only the fact that Fell remained in the room suggested that the meeting of

Barnett and Luederson was anything but casual.

Barnett had regained his composure. "This is kidnaping.

You can be gassed for this."

Luederson lifted heavy eyebrows in an expression of surprise. "My dear Barnett, kidnaping in deep space? There is no such thing. There is no law as yet in deep space. I could have you killed here and no government could claim jurisdiction—or for that matter recover any evidence that a crime had been committed. And if it is kidnaping, what of it?" Anger growled in his voice. Like a discarded mask, the politeness dropped from his manner.

"What do you want with me?" Barnett said. The quicker this came to a head, the better. He knew what Luederson wanted and had known it ever since he had discovered the recording equipment hidden in his moon laboratory.

"Complete construction details, including blueprints, and a working model of the drive you invented," Luederson answered.

Barnett was silent. The drive was the work of his life. It would lift a ship without disturbing a grain of sand on the landing field, without spilling the soup on the mess table. To a man who knew spaceships, the drive was worth any sum of money anywhere in the System. It made the old rocket and jet ships obsolete. It opened up the planets to regular travel, perhaps the stars as well. The man who owned it exclusively, if given the time to equip enough ships in secret, was the master of the System. It was a prize worth striving for, worth killing for, if you were a killer. Luederson was.

"I don't know what you're talking about," Barnett said,

knowing it would get him nowhere.

Luederson's face was bland. "Let's not be childish," he said. "A recorder continuously taped every sound in your laboratory. Toward the end of your experiments, when it was obvious that you were going to be successful, a hidden high-speed camera was installed. I know more about you than you know yourself and almost as much about your drive, except the fine details of the model, which the cameras did not catch, the composition of the alloys, the energy source you are using."

Barnett sighed inwardly. The camera he had not discovered but he had found the microphone of the wire recorder, too late to do anything about it. It was the discovery of the microphone and with it the knowledge that he was being spied upon that had driven him to destroy the model he had made and all working plans, that had sent him into hiding here on Mars. He had no illusions that a lone inventor could

stand up against Luederson.

Like a cat, Luederson watched him. "You will be adequately paid for your services," the man continued. "Any price you want you can have. I want the drive."

"Go to hell," Barnett answered. He didn't need Elso's foresight to know what would happen to him once he had

revealed full construction details of the drive.

For an instant he thought Luederson was going to spring at him, but the man caught himself. Quick anger came and was gone and confidence replaced it. "There are other ways." He nodded to Fell. "Take him to Schultz."

Fell prodded him away and into a locked cabin and left him there. He heard the lock click behind him.

From the bunk the haggard face of Osmer Schultz looked up at him. Then Schultz was on his feet groping for his hand, trying to talk and choking over the words he had to say. "Johnny, you shouldn't have told me where you were going. Somehow they found out or guessed I knew. They

kidnaped me and shot me full of pentathol-the truth serum

-and I spilled everything."

"Pentathol! Lord, I might have guessed it." It was clear how Luederson planned to get the construction details of the drive. And there was no way to stop him. Barnett was silent.

From the corridor outside, rising above the drone of the tubes, came a sharp crack, followed instantly by two more.

"Pistol shots!" Schultz said. "What the hell is going on?"

The shots came again, a barrage of them, then silence. The two men stared at each other, mute questions in their eyes. "Maybe the crew revolted and shot Luederson," Barnett hopefully ventured.

"And maybe they didn't!" Schultz snorted. "This bunch is handpicked. There isn't a man aboard who wouldn't cut his grandmother's throat if Luederson told him to."

The pound of feet sounded in the corridor. No more shots

came.

"If it was a revolt, it has either succeeded or been completely squelched," Barnett said. For a moment, while the shots echoed, new hope had risen in him. Perhaps, if the crew did rebel and overthrow Luederson, somehow or other he might escape and return to the Pillar of Znakevog. Deep in his heart he knew there was only one thing he wanted now—to return to the zone of silence, to explore the properties of that place, to discover the secret hidden there. If the solution of one mystery only opened up another before him, well, that was the way it would have to be. But something vast, something breathtaking in its immensity, was hidden at the Pillar of Znakevog. This he knew now. And he would go back, if he could. The catch was—

A sharp thud passed through the ship and the drone of the driving tubes changed. Beneath their feet the vessel yawed.

"That was the steering tubes!" Schultz exclaimed. "Johnny, this ship is changing course." He rattled the steel door on its hinges, yelling for someone to open up. There was no answer. The ship yawed in a circle.

Later, the drone changed and a new sound echoed through the steel hull, a howl that both instantly recognized as the blasting fury of landing jets beginning their job of gently lowering this mass of steel toward the surface of the planet below them.

A hope that Barnett did not begin to understand was rising in him, a hope as subtle in its origin as the faith of Elso, a hope that moved into the brain-cells like a ghost from another universe, whispering, "Courage. All will yet be well." It was wishful thinking, he told himself. It was selfdelusion. He wanted the ship to return. Therefore he believed it was returning.

But the ship was returning. He could feel its deceleration beneath his feet, he could hear the howl of the landing jets. It came to rest in a heavy landing and the howl of the jets vanished into silence. The lock clicked and the door was opened. The face of Fell looked in.

Fear was on Fell's face. It showed there in a gray color and in sudden drops of moisture. Fell looked wilted. His eyes looked at them and saw them but behind the eyes was the glazed look of a man remembering an event he has seen and knows he has seen but does not choose to believe. He jerked his thumb over his shoulder.

"Out of here, you two. Fast."

"What's wrong?" Barnett spoke. "What happened?"

Fell was so bewildered he was willing to talk. "A damned stowaway happened, a Martian goon." A shrill note crept into his voice as if he knew his memory was lying to him. "I caught him in the stern passageway and took three shots at him." He still held the gun in his hand and he looked at it now as if he could not believe it had failed him. He shook his head. "How I missed that goon I'll never know. But miss him I did and every other gun that took a crack at him missed too. Before we could stop him, he got into the boss's cabin. We're landing you two."

"Landing us?" Barnett repeated the words as if there was about them something too miraculous to believe.

"The boss says to," Fell answered. "That damned goon is in the main cabin pointing some kind of a dinkus at the boss and telling him what to do. And believe me, the boss is doing it. Luede is sweating blood. Move along, you two."

"Wait a minute . . . a stowaway?" Barnett said. "What kind of damned foolishness is this? How would a stowaway get into a spaceship? The airlock is the only entrance."

Barnett pushed past the dazed Fell and moved forward to

the main cabin. He thrust open the door.

Luederson, his face as gray as death, was sitting at his desk staring with sick fascination at a Martian who stood in the middle of the cabin. The Martian held an odd object of crystal and glass pointed at the human. A weapon of some kind; or so Luederson seemed to think.

The Martian was Elso. Not Gelkid, as Barnett had thought

it would be, nor any of the others. Elso!

Elso smiled at them. "You are free? Then we will leave together." His gaze concentrated on Luederson. No words were spoken but there seemed to be communication, for the human flinched and nodded hastily. "Yes. Yes, yes. I will order the blast-off immediately. No, we will not return." On this last point, Luederson seemed most positive. Watching, the dazed Barnett got the impression that no force in the universe was strong enough to drag Luederson back to Mars.

Elso moved through the door. Barnett and Schultz followed. They dropped lightly to the sand, moved quickly

away. Behind them the lifting jets began to roar.

Like a lumbering meteor the ship slid into the silent sky. In the distance, it became a moving star, then was gone.

"You will stay here, now that the evil ones are gone?" Elso spoke gently.

"Of course," Barnett answered. "That is what I really want."

"The invention you made, the drive you invented?" the Martian continued. "Is it not important?"

"Very important, to others. But not to me, any longer. I've seen something else that is more important than the drive. I'm going to publish the full description of the drive, make it free to anyone who wants to use it. That way Luederson will never be able to use it to build up a space monopoly." Barnett was not really thinking about the drive. There was something else on his mind. "Elso—"

"Yes, my friend."

"How did you get into that ship?"

Elso laughed gently. "That puzzles you? I think it puzzled the evil one too."

"But how did you do it?"

The laugh was very gentle. "At another time I will explain it to you. Now we are both very tired."

"Of course. I had forgotten." Barnett was contrite. Elso was old. Such efforts as finding ways into a spaceship and dodging bullets while there must be tiring to the aged.

They stood at the edge of the zone of silence. The day was ending and a cool breeze was pushing across the desert.

"Good-by, my friend," Elso spoke softly. "In some other time we will talk again." Making the sign of parting, he moved into the zone of silence and out of sight, the two men watching.

"Johnny, who was that?"

"That was Elso." With the pressure of so much on his mind, he had forgotten that Schultz did not know Elso. He tried to tell Schultz who Elso was.

Schultz shook his head. "Johnny-whoever he was, when he walked with us-he didn't make tracks in the sand."

"What?"

"Look for yourself-"

Barnett followed the line of Schultz's pointing finger. Behind them, firm and unarguable in the sand, were two sets of footprints.