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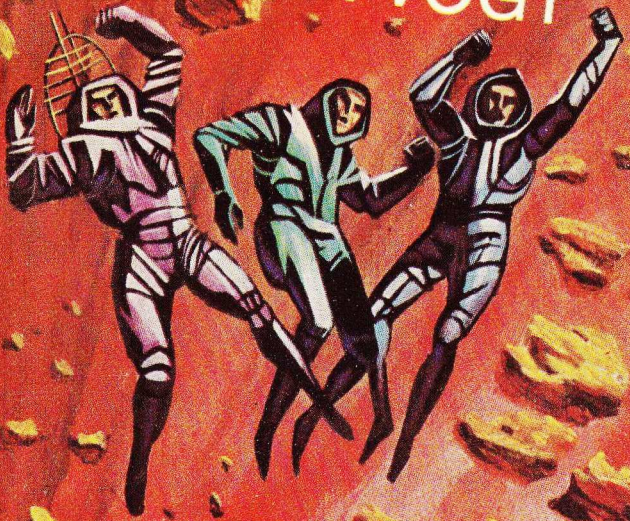
They tampered with eternity

THE TWISTED MEN

A. E. VAN VOGT



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THE TWISTED MEN

by

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THE TWISTED MEN

I

AVERILL HEWITT hung up the phone, and repeated aloud the message he had just been given: "Your spaceship, *Hope of Man,* is entering the atmosphere of Earth."

The words echoed and re-echoed in his mind, a discordant repetition. He staggered to a couch and lay down.

Other words began to join the whirlpool of meaning and implication that was the original message: *After six years . . . the* Hope of Man *. . . after six years, just about the time it should be approaching one of the Centauri sun . . . re-entering the atmosphere of Earth . . .*

Lying there, Hewitt thought: *And for ten years I've lived with the knowledge that our sun is due to show some of the characteristics of a Cepheid Variable—within months now!*

Momentarily, the memory distracted him. His mind went back over the ridicule that had been heaped on him. Scientists had rejected his evidence without giving him a hearing. When he had sent his new instruments to an observatory in a sealed crate, they had been sent back with the seal unbroken. A famous astronomer commented that the sun was not a

Cepheid Variable; and with that icily withdrew from the controversy.

In reply, Hewitt had pointed out that he hadn't said the sun was a Cepheid Variable. He had merely stated it would show some of its characteristics. Atually, the ultimate effect would be that of a baby nova.

The phrase captured the headlines, but only as a one-week wonder. Gradually, he'd realized that the human race could not imagine its own destruction. He decided to use his private fortune to send a ship with colonists to remote Alpha Centauri.

Thinking back to those days, Hewitt recalled his efforts to find people who would go.

The problem had been brand-new. The newly-invented atomic space drive, already widely used for journeys among the planets, had yet to be tried on an interstellar trip.

Years ago, the Space Patrol had requested funds to make an exploratory journey, but the money had not even yet been appropriated.

Nobody actually put on much pressure. The prodigious task of exploiting the solar planets was barely begun.

The first man who volunteered to go on the *Hope of Man* was Armand Tellier, a thin-faced young man with too-transparent skin and pale blue eyes.

He had majored in physics at the Sorbonne. He had said, "My wife and I feel that if we give ten years to this trip, I'll be an authority on Einsteinian physics when I get back."

He emphasized the "get back" ever so slightly.

Hewitt had pretended not to hear the qualification. It was enough for him if they were out of the solar system when the sun underwent the changes he had predicted.

Tellier was speaking again. "You understand," he said, "I'm making this journey because you have had the financial strength to install an atomic pile. That means acceleration can

be continuous. But—" he paused to emphasize his point; his eyelids flickered—"I must have authority to maintain acceleration to the halfway point. I must have an opportunity to make a study of what happens when our ship approaches the speed of light."

Hewitt frowned at the floor of his study. He knew what he intended to say in substance. At thirty-eight he still worried about just how he should word it. In the end he was blunt. "You can have the authority, on one condition."

The pale blue eyes grew intent. "What is that?"

"Your wife must be with child at the time of take-off."

There was a long pause; then: "I'm sure," said Tellier in a formal voice, "that *we* are prepared to make even that sacrifice to further my career."

He departed. In describing him to his wife that night, Hewitt called him a cold fish.

"Like you are now, Averill?" she said.

She was a dark-haired beauty with eyes that had starry glints in them. The stars were hard and bright, as she looked at him across the dinner table.

Hewitt almost laughed. Then he stared at her more intently. Finally he sighed, and put down his knife and fork. "I've seen this coming," he said.

She said bitterly, "You've made a fool of all of us with this prediction of destruction of the solar system. I can't take it any longer."

Hewitt said wretchedly, "I'll make a settlement, but I must have the children. I want to send them along."

She said in an uneven tone, "The children go with me. I'll take a lower settlement."

"No!"

She was trembling. The stars in her eyes were dulled. "If you don't let me have the children without a fight, I'll take you to court. I'll tie up your money by legal procedures. You won't be able to finish building the ship."

Silence; then: "You win, Joan."

She started to cry. He saw that she hadn't expected him to choose the ship instead of her.

One newspaper reported the next day: "BABY NOVA" MAN TO BE DIVORCED. But—the papers also described Tellier's reasons for wanting to go on the journey. As a result seven young scientists and their wives were stimulated to make the "sacrifice." And then in one week three visionaries came from different parts of the country. Each separately described how he had had a vision of Sol flaring up and engulfing Earth. That was not the way it would be, but Hewitt refrained from enlightening them. In his presence the wives separately expressed themselves as willing to carry out their share of the bargain.

A youthful soldier of fortune turned up with a young blonde who purported to be his wife. Hewitt did not require a wedding certificate. A doctor, a member of the narrow sect, said that he and his wife had decided that a medical man ought to go along. "The moment," he said, "that we realized the need, I knew it was my duty to go."

When no experienced space crewmen volunteered for the journey, Hewitt ran want ads offering fabulous wages. Five young couples responded. They didn't seem to realize the money would have no value where they were going.

There was only one reply to Hewitt's ad for a licensed spaceship commander. A grizzled fifty-year-old came, bringing a young girl with him. He introduced himself as Mark Grayson, and the girl as his ward, Juanita Lord. His enthusiasm was tremendous. "I've dreamed all my life of commanding the first ship to another star. If you accept me I plan to marry Juanita. She's very anxious to go, and of course she loves me very much. Isn't that right, dear?"

The girl nodded vigorously. Hewitt blinked at her, shocked in spite of himself. He started to protest, "But she's only a—" He stopped, gulping. He said doubtfully, "There's the matter

of legal age. I question whether any court would give you two permission under such circumstances."

"I'm eighteen," said Juanita earnestly. She added plaintively, "I know I look young, but don't think I'm not grown up."

She was a startlingly pretty girl. She looked twelve or fourteen, at most. Hewitt stiffened himself. He said slowly, "It would be inadvisable for publicity reasons, for—"

He stopped himself. He thought, *What am I saying? The future of the race is at stake. Besides, I'm actually saving her life.*

Aloud, he said, "You're hired."

The spaceship, *Hope of Man*, bound for Alpha Centauri, had lifted up from the soil of Earth on April 30th, 2072 A.D., with thirty-eight people aboard.

Hewitt had stayed behind. He had considered that his fight was just beginning. . . .

His bitter reverie ended, as the phone began to ring again. He climbed off the couch; and as he went to answer, he thought, *I'll have to go aboard and try to persuade them. As soon as they land, I'll—*

This time his caller was an official of the Space Patrol. Hewitt listened shakily, trying to grasp the picture the other was presenting. It had proved impossible to communicate with those aboard, and the ship was now approaching the Earth apparently in a great descending spiral, because of the Earth's revolution, but actually in a straight-line course.

"We've had men in spacesuits at both observation ports, Mr. Hewitt. Naturally, they couldn't see in, since it's one-way-vision material. But they pounded on the metal for well over an hour, and received no response."

Hewitt hesitated. He had no real comment to make.

He said finally, "How fast is the ship going?"

"About a thousand miles an hour."

Hewitt scarcely heard the reply. His mind was working

faster now. He said, "I authorize all expense necessary to get inside. I'll be there myself in an hour."

As he headed for his private ship, he was thinking, *If I can get inside, I'll talk to them. I'll convince them. I'll force them to go back.*

He felt remorseless. It seemed to him that, for the first time in the history of the human race, any means of compulsion was justified.

Two hours later, he said, "You mean, the airlock won't open?"

He said it incredulously, while standing inside the rescue ship, *Molly D.*, watching a huge magnet try to unscrew the outer hatch of the *Hope of Man*. Reluctantly, Hewitt drew his restless mind from his own private purpose. He thought, *There must be something seriously wrong.*

Instantly, he felt impatient, unwilling to accept the need to adjust to the possibility that there had been trouble aboard. He said urgently, "Keep trying! It's obviously stuck. That lock was built to open in less than two minutes."

He was scarcely aware of how completely the others had let him take control of rescue operations. In a way, it was natural enough. The *Molly D.* was a commercial salvage vessel, which had been commandeered by the Space Patrol. Now that Hewitt was aboard, the representative of the Patrol, Lieutenant Commander Mardonell, had assumed the role of observer. And the permanent captain of the vessel took instructions, as a matter of course, from the man paying the bills.

More than an hour later, the giant magnet had turned the round lock-door just a little over one foot. Pale, tense and astounded, Hewitt held counsel with the two officers.

The altimeter of the *Molly D.* showed ninety-one miles. Lieutenant Commander Mardonell made the decisive comment about that. "We've come down about nine miles in

sixty-eight minutes. At that rate we'll strike some high landmark in ten hours."

It was evident that it would take much longer than that to unscrew the thirty-five yards of thread on the lock-door at one foot per hour.

Hewitt considered the situation angrily. He still thought of this whole boarding problem as a minor affair, an irritation. "We'll have to get a big drill," he said. "Cut through the wall."

He radioed for one to be sent ahead. But, even with the full authority of the Space Patrol behind him, two and a half hours went by before it was in position. Hewitt gave the order to start the powerful drill motor. He left instructions: "Call me when we're about to penetrate."

He had been progressively aware of exhaustion, as much mental as physical. He retreated to one of the ship's bunks and lay down.

He slept tensely, expecting to be called any moment. He turned and twisted, and, during his wakeful periods, his mind was wholly on the problem of what he would do when he got inside the ship.

He awoke suddenly and saw by his watch that more than five hours had gone by. He dressed with a sense of disaster. He was met by Mardonell.

The Space Patrol officer said, "I didn't call you, Mr. Hewitt. Because when it became apparent that we weren't going to get in, I contacted my headquarters. As a result we've been getting advice from some of the world's greatest scientists." The man was quite pale, as he finished, "I'm afraid it's no use. All the advice in the world hasn't helped that drill."

"What do you mean?"

"Better go take a look."

The drill was still turning as Hewitt approached. He ordered it shut off, and with his mind almost blank examined

the metal wall of the *Hope of Man.* It was penetrated—he measured it—to a depth of three-quarters of a millimter.

"But that's ridiculous," Hewitt protested. "This metal was cast right here on Earth eight years ago."

Mardonell said, "We've had two extra drills brought up. Diamonds don't mean a thing to that metal."

He added, "It's been calculated that she'll crash somewhere in the higher foothills of the Rockies. We've been able to pin it down pretty accurately, and people have been warned."

Hewitt said, "What about those aboard? What about—" He stopped. He had been intending to ask, "What about the human race?" He didn't say it. That was a special madness of his own, which would only irritate other people.

Trembling, he walked over to a port-hole of the rescue ship. He guessed they were about fifteen miles above the surface of the earth. Less than two hours before crashing.

When that time limit had dwindled to twenty minutes, Hewitt gave the order to cast off. The rescue ship withdrew slowly from the bigger host, climbing as she went. A little later, Hewitt stood watching with a sick look on his face, as the round ship made its first contact with the earth below, the side of a hill.

At just under a thousand miles an hour, horizontal velocity, it ploughed through the soil, creating a cloud of dust. From where Hewitt and his men watched, no sound was audible, but the impact must have been terrific.

"That did it," said Hewitt, swallowing. "If anybody was alive aboard, they died at that moment."

It needed no imagination to picture the colossal concussion. All human beings inside would now be bloody splotches against a floor, ceiling or wall.

Somebody shouted, "She's through the hill!"

Hewitt said, "My God!"

An improbable thing had happened. The hill, made of rock

and packed soil, thicker than a hundred ships like the *Hope of Man,* was sheared in two. Through a cloud of dust, Hewitt made out the round ship skimming the high valley beyond. She struck the valley floor, and once again there was dust. The machine did not slow; showed no reaction to the impact. It continued at undiminished speed on into the earth.

The dust cleared slowly. There was a hole three hundred feet in diameter, slanting into the far hillside. It began to collapse. Tons of rock crashed down from the upper lip of that cave.

The rescue ship had sunk to a point nearer the ground, and Hewitt heard plainly the thunder of the falling debris.

Gradually, the surface turmoil subsided. The *Molly D.* landed. Hewitt began numbly to issue orders that would begin the job of fencing in the danger areas. He thought of the problem as one that would be resolved by excavation. The *Hope of Man* had buried itself. It would have to be dug up.

He had the vague thought that the hard metal of the walls could have withstood the shock, and that the vessel might be reparable.

Rock and soil were still falling when a radio report arrived. A mountain had collapsed fifty miles away. There was a new valley, and somebody had been killed. Three small earthquakes had shaken the neighborhood.

For twenty minutes, the reports piled up. The land was uneasy. Fourteen more earthquakes were recorded. Two of them were the most violent ever known in the affected areas. Great fissures had appeared. The ground jumped and trembled. The last one had taken place four hundred miles from the first; and they all lined up with the course of the *Hope of Man.*

Abruptly, there came an electrifying message. The round ship had emerged in the desert, and was beginning to climb upward on a long, swift, shallow slant.

Less than three hours later, the salvage ship was again clinging to the side of the larger machine. Its huge magnets twisted stubbornly at the great lock-door. To the half-dozen government scientists who had come aboard, Hewitt said: "It took an hour to turn it one foot. It shouldn't take more than a hundred and five hours to turn it thirty-five yards. Then, of course, we have the inner door, but that's a different problem." He broke off. "Gentlemen, shall we discuss the fantastic thing that has happened?"

The discussion that followed arrived at no conclusion.

Hewitt said, "That does it!"

Through the thick asbesglas, they watched the huge magnet make its final turn on the inner door. As they watched from behind the transparent barrier, a thick metal arm was poked into the airlock, and shoved at the door. After straining with it for several seconds, its operator turned and glanced at Hewitt. The latter turned on his walkie-talkie.

"Come on back inside the ship. We'll put some air pressure in there. That'll open the door."

He had to fight to keep his irritation out of his voice. The outer door had opened without trouble, once all the turns had been made. There seemed no reason why the inner door should not respond in the same way. The *Hope of Man* was persisting in being recalcitrant.

The captain of the salvage vessel looked doubtful when Hewitt transmitted the order to him. "If she's stuck," he objected, "you never can tell just how much pressure it'll take to open her. Don't forget we're holding the two ships together with magnets. It wouldn't take much to push them apart."

Hewitt frowned over that. He said finally, "Maybe it won't take a great deal. And if we do get pushed apart, well, we'll just have to add more magnets." He added swiftly, "Or maybe we can build a bulkhead into the lock itself, join the two ships with a steel framework."

It was decided to try a gradual increase in air pressure. Presently Hewitt was watching the pressure gauge as it slowly crept up. It registered in pounds and atmospheres. At a fraction over ninety-one atmospheres, the pressure started rapidly down. It went down to eighty-six in a few seconds, then steadied, and began to creep up again. The captain barked an order to the engine room, and the gauge stopped rising. The man turned to Hewitt.

"Well, that's it. At ninety-one atmospheres, the rubber lining began to lose air, and didn't seal up again till the pressure went down."

Hewitt shook his head in bewilderment. "I don't understand it," he said. "That's over twelve hundred pounds to the square inch."

Reluctantly, he radioed for the equipment that would be needed to brace the two ships together. Whey they waited, they tried several methods of using machinery to push open the door. None of the methods worked. Hewitt was startled, and for the first time let into his foreconsciousness an idea that had been at the back of his mind now for several days.

It had to do with Armand Tellier. Tellier had been intending to do some experimenting, he recalled, uneasily. Carefully, one by one, he enumerated the fantastic things that had happened. He felt himself turn pale with excitement. On the basis of that first glimmering picture, he estimated that it would take *nine hundred atmospheres* of pressure to force open the inner lock door of the *Hope of Man.*

It required just under nine hundred and seventy-eight.

The door swung open grudgingly. Hewitt watched the air gauge, and waited for the needle to race downward. The air should be rushing through the open door, on into the Centauri ship, dissipating its terrific pressure in the enormous cubic area of the bigger machine. It could sweep through like a tornado, destroying everything in its path.

The pressure went down to nine hundred and seventy-three. There it stopped. There it stayed. Beside Hewitt, a government scientist said in a strangled tone, "But what's happened? It seems to be equalized at an impossible level. How can that be? That's over thirteen thousand pounds to the square inch."

Hewitt drew away from the asbesglas barrier. "I'll have to get a specially designed suit," he said. "Nothing we have would hold that pressure for an instant."

It meant going down to Earth. Not that it would take a great deal of time. There were firms capable of building such a suit in two days. But he would have to be present in person to supervise its construction.

As he headed for a landing craft, Hewitt thought, *All I've got to do is get aboard, and start the ship back toward Centaurus. I'll probably have to go along. But that's immaterial now.* It was too late to build more colonizing ships.

He was suddenly confident that the entire unusual affair would be resolved swiftly. He had no premonition.

It was morning at the steel city when he landed. The news of his coming preceded him; and when he emerged from the spacesuit factory shortly after noon, a group of reporters were waiting for him. Hewitt gave them some crumbs of information, but left them dissatisfied.

As he headed for his own craft, he noticed that several men in uniform were waiting for him. They wore the uniform of the federal police. As Hewitt approached they sauntered casually toward him. Something in their attitude warned him. He turned, and started back toward the factory. A paralyzer beam flashed. He fell, twisting in anguish.

The papers reported that he had "resisted arrest."

II

FOR TWENTY-FOUR hours, Hewitt lay in a jail bunk, and thought about incredible things. The confinement seemed to have released his imagination, for his thoughts were on the wild side and partly, at least, untenable. But he calmed down, and presently he was able to write his ideas in logical sequence. He told himself that he did so to clarify his own thinking. He made the following points:

The *Hope of Man* was not affected by the gravitational forces of Earth. It was moving through the solar system as an independent body.

Coming in from outer space the ship had intersected the path of the earth around the sun. In pursuing its straight course, it had passed through the outer rim of Earth, but it was Earth that moved away from it, not it away from Earth.

The tremendous hardness of the metal and the fact that the solid earth offered no obstacle whatever to its movements, suggested that the round ship had enormous mass. Hewitt hesitated at that point. He was beginning to think he might give the account to the press after all. He added: "The density is clearly out of all proportion to any known substance." He gave the air pressure as evidence. He hinted at matter density almost, though not quite, comparable to that found in the interiors of certain stars. He meant white dwarfs, like Sirius B. He meant neutronium. But now that he was consciously writing for publication, he did not say so.

He had a purpose in mind. It seemed to him that if he made this explanation properly, he would be freed to help in boarding the *Hope of Man.*

But now he had an unpleasant point to make. For a man who had predicted that the sun would destroy Earth, his next statement was loaded with dynamite—for himself. Nevertheless, he finally wrote firmly:

"If the robot control is responsible for the ship's return, then it will still be in operation. It will accordingly start edging the *Hope of Man* over, so that the two bodies will presently meet again. We cannot reasonably expect that its passage will once more be limited to a shadow surface penetration. The ship may go down to the magma. I need hardly point out that an irresistible hundred-yards-in-diameter body may cause major planetary convulsions."

On reading that over, he realized it would shock the world. Other people would not take his attitude that, since such a disaster would happen later than the greater catastrophe of the baby Nova, it was a matter for concern because the ship might be destroyed. To them, the danger *from* the ship, not *to* it, would be important. Mobs might well try to lynch the owner of the vessel.

Shuddering, Hewitt tore up his account and burned it. He was still shivering at what he considered his narrow escape when his lawyer came. It seemed there would be due process of law. Meanwhile, *habeas corpus*, bail, freedom. The government, it seemed, wasn't even certain it had a case against him. Somebody had acted hastily.

Several civil suits had been filed. People were suing him for damage to their property. Somebody had owned the mountain that had become a valley. Nearly a dozen people claimed to have been hurt. Hewitt ordered that all claims should be fought by every device of the law. Then he collected the specially-built spacesuit, and headed once more for the *Molly D.*

More than an hour was spent in testing. But at last a magnet drew shut the inner door of the *Hope of Man.* Then the air pressure in the connecting bulkhead was reduced to

one atmosphere. Hewitt, arrayed in his new, motor-driven spacesuit, was then lifted out of the salvage ship into the bulkhead by a crane.

The door locked tight behind him. Air was again pumped into space. Hewitt watched the suit's air-pressure gauges carefully as the outside pressure was gradually increased to nine hundred and seventy-three atmospheres. When, after many minutes, the suit showed no signs of buckling, he edged it forward in low gear and gently pushed open the door of the big ship.

A few seconds later he was inside the *Hope of Man.*

DARKNESS!

The change had come at the instant he rolled into the ship. The difference was startling. From outside, the corridor had looked bright and normal.

He was in a ghastly gray-dark world. Several seconds went by as he peered into the gloom. Slowly, his eyes became accustomed to the dim lighting effect.

Six years had gone by since he had last been aboard the ship. Even in that half-night he was struck by a sense of smallness.

He was in a corridor which he knew pointed into the heart of the ship. It was narrower than he remembered it. Not just a little narrower; a lot. It had been a broad arterial channel, especially constructed for large equipment. It was not broad any more.

Just how long it was he couldn't see. Originally, it had been just under three hundred feet in length. He couldn't see that far. Ahead, the corridor faded into impenetrable shadow.

It seemed not to have shrunk at all in height. It had been twenty feet high, and it still looked twenty.

But it was five feet wide instead of fifteen. It didn't look as if it had been torn down and rebuilt. It seemed solid, and, besides, rebuilding was out of the question. The steel frame-

work behind the facade of the wall was an integral part of the skeleton of the ship.

He had to make up his mind, then, whether he would continue into the ship. And there was no doubt of that. With his purposes, he had to.

He paused to close the airlock door. And there he received his second shock.

The door distorted as it moved. That was something else that had not been visible from outside. As he swung it shut, its normal width of twelve feet narrowed to four.

The change was so monstrous that perspiration broke out on his face.

And the first, sharp, tremendous realization was in his mind. *But that's the Lorentz-Fitzgerald contraction theory effect!*

His mind leaped on to an even more staggering thought: *Why, that would mean this ship is traveling at near the speed of light.*

He rejected the notion utterly. It seemed a meaningless concept.

There must be some other explanation.

Cautiously, he started his machine forward on its rubber wheels. The captain's cabin was on this floor, and that was his first destination.

As he moved ahead, the shadows opened up reluctantly before him. Presently he made out the door of the cabin. When he was ten feet from it, he was able to see the ramp in the distance beyond.

The reappearance of things he remembered relieved him. What was more important, they seemed to be at just about the right distance. First the airlock, then the captain's cabin, then the ramp.

The corridor opened out at the ramp, then narrowed again; and in the distance beyond was the second airlock.

Everything looked eerily cramped because of the abnormal narrowing effect. But the length seemed to be right.

He expected the door of the captain's cabin to be too narrow for his spacesuit to get into. However, as he came up to it, he saw that its width was as he remembered it.

Hewitt nodded to himself. *Of course, even by the Lorentz-Fitzgerald theory, that would be true. Contraction would be in the direction of flight.*

Since the door was at right angles to the flight-line, the size of the doorway was not affected. The door jamb, however, could probably be narrower.

The jamb *was* narrower. Hewitt had stopped his suit to stare at it. Now, he felt himself pale with tension.

It doesn't fit, he told himself. *Like the hall, it's narrower only by a factor of three, whereas the air pressure varies nine hundred seventy-three to one.*

Once more, he assured himself that the explanation could not possibly include the famous contraction theory. Speed was not a factor here. The *Hope of Man* was practically at rest, whatever its velocity might have been in the past.

He stopped that thought. *I'm wasting time. I've got to get going.*

Acutely conscious again that this was supposed to be a quick exploratory journey, he shifted the softly spinning motor into gear, and moved forward through the doorway.

As he rolled all the way into it, he saw that Captain Mark Grayson sat at a long, extremely narrow desk. He seemed to be writing something.

The grizzled space veteran sat with unnatural steadiness. He did not look up as the machine rolled nearer, though he faced the door, and was in a position to catch the slightest movement from the tops of his eyes.

Slowly, watchfully, Hewitt rolled around the desk. He was shocked, but no longer so desperately surprised when he

saw that the man was only a few inches thick. Seen in front view, he looked unchanged.

From the side, he was a tall man with a head and body that looked like a caricature of a human being, such as might be seen in a badly distorted circus mirror.

Right then and there, Hewitt suspended his judgment. Some of the phenomena suggested the Lorentz-Fitzgerald effect. Even the weird light could be the result of normally invisible radiation projected to visible frequency levels.

But that was as far as it went. Most of what he had seen could only be explained if the ship were traveling simultaneously at several different speeds.

He was beside, and slightly behind Grayson now. He had to strain his eyes to see what was on the paper. He read:

> Tellier is exhilarated. He informed me that yesterday, according to the instruments, we had attained a velocity of 177,000 miles per second. Today, though the pile is even hotter, there has been no change in our registered speed. He admits he can only guess at what has happ

Whatever had happened at that moment must have struck like a secret knife. Grayson had no advance warning; his writing had been cut off in mid-word. He sat here now, a mute witness to the reality that disaster could catch a man between heartbeats.

Hewitt began his retreat from the control room. His mind now was almost blank.

Nothing he could think could compare with the fantastic reality.

As he raced his thick, tank-like suit along the corridor, Hewitt consciously braced himself, consciously accepted the abnormality of his environment. He grew more observant, more thoughtful—and more tense.

He came to the place where the corridor divided. He slowed. One side, he knew, curved up a spiral ramp to the living quarters of the crew. The other went down to the engine room, one of the storerooms and the apartments of the scientists.

There were no stairways or elevators in the *Hope of Man.* It had been intended that people should use their muscles for every necessary movement.

Hewitt headed down. As he reached the third floor down, and glanced along that corridor, he saw that a man was standing at one of the entrances to the lower storeroom.

Hs posture was as unchanging as Captain Grayson's. His eyes were wide and staring: they seemed to glare straight at the motor-driven spacesuit. But neither the eyes nor the rest of the man's body showed any reaction to Hewitt's presence. His body, seen from the side, looked only inches in thickness. Because he was standing, he seemed even more inhuman than Grayson had been.

Hewitt recognized him as Draper, one of the scientists. Draper's field was plant biology.

He found three more scientists standing in various postures at the entrance of the engine room. Since they did not all face in the direction of flight, they presented an amazing assortment.

One, seen from the front, was as thin as a post, a gaunt, incredible looking creature. Another was foreshortened from a side view. He simply seemed crippled. The third one resembled Captain Grayson and Draper; his narrowness was through the thickness of his body.

Inside the engine room, Armand Tellier—a mere sliver of a man as seen from the side—was bending over a section of the instrument board. He stared down at it with unwinking eyes, and neither turned nor moved while Hewitt watched.

Dissatisfied, feeling he was missing something in this silent

drama, Hewitt gave his attention to the engines. His first glance at the line of meters shocked him.

The pile was as hot as a hundred hells. The transformer needle was abnormally steady, for the colossal load it was bearing. The drive was carrying an energy flow of ninety out of a possible hundred.

The resistance to acceleration must be tremendous, for the accelerometer needle registered zero. As he glanced at the speedometer, Hewitt's mind flashed back to what Captain Grayson had been writing in his logbook: " . . . 177,000 miles per second. . . ."

That was what the speedometer showed.

For the second time, Hewitt thought, "But surely that doesn't mean it still—"

His mind refused to hold the thought.

Nevertheless, by the time he retreated from the engine room, his brain was beginning to relax. And part of the greater picture was forming there.

It would have to be discussed, thought about, clarified. Tremendously stimulated by the possibilities, but depressed by the death that was all around him, he started on what he intended to be a swift and routine round of the rest of the ship.

Mrs. Tellier sat in a chair with a child on her knee, a fixed smile on her face. Two scientists' wives had been caught by immobility as they were taking dishes from the automatic dish-washing machine. They made an oddly life-like domestic tableau. The other children were in a large play-pen, with several women sitting in chairs nearby, apparently watching them. All were distorted.

Upstairs, in the crew's quarters, Hewitt found not only the crewmen and their wives, but Warwick, the soldier of fortune, Marie, his blonde wife, and Juanita Lord, the child bride of Captain Grayson. The girl looked older, and she had a sullen expression on her immobile face. Warwick had a

gun in his hand, which he had evidently been cleaning. The shells were spilled out on his lap.

Despite the hideous distorting effect from the light and the one-third contraction, the postures of those present were conventional. That puzzled Hewitt anew.

He had been trying to hold away from his consciousness the extent of the disaster that was here. Just for a moment it penetrated, in spite of himself. Just for an instant it hurt like fury. He had a brief but unnerving sense of guilt. From the corner of one eye, he saw a group of children. All were sitting or standing in the various positions that must have been the results of their final movements.

Hastily, not looking directly at the youngsters, Hewitt guided his machine out into the corridor. He was heading along it when he thought, *One of those babies was in an extremely odd position.*

He slowed down, disturbed. He oughtn't to have been so squeamish. He should have taken a good look at the scene.

The only thing is, he told himself, *I've got to get out of here. I can't stop for a second look.*

At the head of the ramp, he hesitated. He couldn't go back without checking. Very pointed questions might be asked him. He'd better have the answers.

III

BACK HE went to the crew's quarters. The scene was unchanged. There were six children in one corner. They were all between two and three years old, he judged.

That was important because it gave some idea of how much time had actually gone by aboard the ship. At most,

three and a half years. And yet the *Hope of Man* had been gone for six!

Unquestionably this ship had undergone some of the contraction effects predicted by the Lorentz-Fitzgerald theory. Even time had been telescoped.

It was a point Hewitt noted only in passing. Something else, something far more important—or so it seemed—absorbed him. Four of the children were sitting on the floor amid a wilderness of toys. One child stood flat-footed, in an awkward position. The sixth had been caught in the act of getting to his feet.

Hewitt stared at the boy in utter fascination. The sense of urgency in him was tremendous. It was time he was out of here.

But the youngster, in getting up had got himself into an unusual position. He was balanced on the tip of one toe and the outspread fingers of one chubby hand. There he had frozen.

Almost blankly, Hewitt realized the truth. He had not, he saw, let his mind carry him far enough. The difference in air pressure, the immense tensile strength of the metal—these things had been but part of a greater whole.

There was a time difference also. These people lived one second while he lived nine hundred and seventy-three seconds. From their point of view, he was making his entire inspection of their ship in less than one second of their time.

He thought, *They're alive! But they're living so slowly compared to me that, even if I had a chance to listen to their heartbeats, I wouldn't hear anything.*

The question was, how could contact be established? And, when it was, what good would it do?

The uncertainty was still in his mind as he raced back to the airlock, and the *Molly D.*

During Hewitt's absence from the salvage vessel, a great

man had come aboard. He listened with the others to Hewitt's account, and then remained silent and thoughtful through most of the discussion that followed. His presence had a subduing effect on the younger government scientists aboard. No one had very much to say. The attitude seemed to be, "You stick your neck out first!"

As a result, the conversation remained "close to the ground." Phrases like "a natural explanation" abounded. When he had listened to all he could stand, Hewitt said impatiently, "After all, these things *have* happened. What do we mean by natural?"

He was about to say more, when the great man cleared his throat and spoke for the first time since he had been introduced. "Gentlemen, I should like to try to clear away the debris that has accumulated at the beginning of this obstacle course."

He turned to Hewitt. "I want to congratulate you, Mr. Hewitt. For the first time in history, the mythical observer—that mathematical oddity—has come to life. You have seen phenomena that, till now, have never been more than a set of equations."

Without any further preliminary, he launched into an explanation for what had happened that was similar to what Hewitt had written—and destroyed—in jail. It differed in that he also offered a theory to account for the fact that the drive of the *Hope of Man* was nearly full on, and that apparently the ship was traveling at very near the speed of light in its own zone of existence, as he put it, "in a sort of parallel time to now, this minute, this second!"

Further knowledge might, among other things, account for one fact. How had this zone succeeded in bringing the *Hope of Man* back to Earth when the ship had accelerated in the opposite direction?

He broke off. "However, the time has come for a practical solution. I offer the following."

Duplicates of a carefully-written letter must be placed in the hands of Armand Tellier and Captain Grayson. The circumstances would be described, and the men would be urged to cut off both the drive and the robot pilot. If this were not done within a certain time—taking into account the difference in time rate—it would be assumed that the letter had been misunderstood. At that point Hewitt would go aboard, shut off the robot and reverse the drive.

As soon as the *Hope of Man* had slowed to a point below the critical speed, personal contact could be established. Long before that, of course, the truth of the account in the letters would have been established to the satisfaction of everyone aboard.

Hewitt frowned over the suggestions. He could think of no reason why they shouldn't work. And yet, having been aboard that foreshortened, eerie ship, with its pile operating to the very limit of safety, its lopsided passengers moveless as in death, he had a feeling that some factor was being neglected.

He said slowly, "I'll have to take along food and water, if I have to do the shutting off. This time difference could become very involved."

It was also decided that the *Molly D.* would cast off as soon as the letters were delivered. If it was later necessary to put him aboard again, it would connect up just long enough to do so, then once more it would pull clear, and stand by.

Hewitt helped prepare the letter. Then once more he was put into the mobile spacesuit. And again he crossed the threshold of the *Hope of Man.* As he moved through the outer doorway, something caught at his heart. He swayed in momentary nausea.

The feeling passed as quickly as it had come. He noted the reactions, and then without further incident he delivered one copy of the letter to Grayson and another to Tellier. He

was greatly stimulated to notice that Grayson had finished writing the word "happened" during his absence. He could see no change, however, in the position of Tellier.

He returned to the *Molly D.*, but did not wait for them to cast off. He headed for Earth, and his doctor. After a complete examination, he was pronounced, as the doctor phrased it, "One hundred per cent physically fit."

Relieved that his brief nausea had had no pathological basis, Hewitt set about clearing up his affairs. It had been decided to give those aboard the *Hope of Man* fifteen minutes (their time) to react to the letters. That would be about ten days, normal time.

Among other things, Hewitt, after some hesitation, called up Joan, and asked her if he could call on her. She refused.

"It wouldn't be fair to the children," she said. "They were just beginning to live down the first publicity, and now there it is again."

Hewitt knew what she meant. Other young people were cruel. They taunted. They asked such questions as, "When is your old man going to fall into the sun?"

It was all very silly, but it was devastating too.

Yet he stayed on the phone. There was a purpose on his mind. Life without her had been bitter and empty. It was a lonely world for a man with his obsession.

Hesitantly, dreading her reaction, he explained what was in his heart. He would have three more spacesuits constructed.

"We can all go aboard together," he said urgently. "The whole thing is really very simple. As soon as we're on, I'll reverse the engines. It won't take long before we're at a one-to-one relationship with those aboard. It's a matter of reducing speed."

The silence at the other end told him at least a part of what she was thinking. He forced himself to go on:

"Joan, you can't just say no. You've got to give the children

their chance to escape the holocaust. Beside that, a little ridicule is nothing. And, anyway, once we're on the way to Centaurus, we don't have to worry about what people think. Try to look on it as a colonizing venture—"

There was a click in his ear.

"Joan!" He spoke sharply.

There was no answer. With trembling fingers, he dialed her number again. The phone at the other end rang and rang. Convinced, finally, that she wouldn't even speak to him, he hung up. What hurt particularly was that she didn't seem to have realized that this was their good-by. They would never see each other again.

He could have justified her action, but he made no attempt to do so.

He put his affairs in order, as a man might who expected to die. Promptly on the tenth day, he reported back to the *Molly D.*, which was again attached to the larger vessel.

He had few doubts. With his armored suit, and his time-ratio advantage, he could dominate the situation aboard until he had reduced the ship's speed to the point where he and it were at unity.

First of all, he would lock up the ship's arsenal. He intended to search every person aboard. Individuals like Warwick, who played with weapons in their spare time, would receive special attention.

I'm not, Hewitt told himself, *taking the slightest chance. These people are going to Centaurus whether they like it or not.*

As he crossed into the airlock of the *Hope of Man,* a knife-like spasm of pain stabbed through his heart. It was so sharp, so agonizing, he almost fainted with nausea.

The shock staggered him, but—as it had the first time—the feeling passed.

Shaken, Hewitt crossed the inner threshold, and closed

and locked the door that looked so normal from the outside, and so lopsided from the inside.

He found himself in the dim, gray-black world of the ship's interior.

As he turned to head along that unnaturally narrow corridor, something grabbed his body from behind and squeezed it mercilessly. The sensation of being caught by a giant hand was so realistic that he tried to turn back toward the door.

The great hand began to slip. He had the feeling then of being squirted from a space that was too small for him into something—vast.

That was the last thing he remembered before blackness closed over him.

He must have been unconscious only a few moments. When he opened his eyes, he saw that the suit was still in the process of turning toward the door.

In a moment it would smash against the hard metal of the lock.

He had an impression that something else was—different—but there was no time to notice what it was.

He grabbed hastily at the controls and applied the brakes. The suit stopped as if it had struck a brick wall. He reeled in his saddle, breathing hard, then recovered his balance.

He thought tensely, *It's the effect of coming from normal space into the zone. The first time it didn't bother me on the sense level. The second time I must still have been overbalanced from the first attempt, and so there was a moment of pain. This time—"*

His mind poised. He felt his eyes grow large and round. With a kind of dreadful fascination, he stared at the closed airlock door.

It was no longer lopsided, but normal, just the way it would be if—

He whipped his machine around, and gazed wildly at the corridor. It was brightly lighted. The dim, eerie, shadowy effect was gone as if it had never been.

He noticed something else. The corridor was not narrow any more. He couldn't tell exactly, but he guessed that it was fifteen feet wide, its original width.

The tremendous truth burst upon Hewitt. He was no longer an observer of this scene.

He was part of it.

He also would now appear lopsided to another coming aboard for the first time. To himself, and to those caught as he was, he would be quite normal.

People affected by the Lorentz-Fitzgerald phenomena were not aware of any difference in themselves. The contraction influenced their bodies and the light that came to their eyes—everything was equally distorted.

Tensely, Hewitt remembered the sensation as of being squeezed. Readjustments within his body, unevenly distributed during the change. His front changing faster than his back.

He shuddered with the memory of pain.

With an effort, Hewitt caught his scattered thoughts: *I've got to get back on the* Molly D. *If I could get in here, I could also get out. I—*

Out of the corner of one eye, he caught sight of the air-pressure gauges of his suit. The one that registered the inside pressure didn't matter. It was at its norm of one atmosphere.

The gauge for outside pressure was also at one atmosphere.

The change was part and parcel of what had already happened. But actually seeing it was a shock almost greater than anything that had yet occurred.

There was a sound farther along the corridor. Nine men debouched from the Captain's cabin. Hewitt recognized Warwick among the group, and two members of the crew.

He caught only a glimpse of their faces. They carried automatic pistols and paralyzers. They were intent on what they were doing, for none so much as glanced toward Hewitt.

They headed in a body towards the ramp. They were gone down it almost as they had come.

Behind them they left silence.

Hewitt was startled, and alarmed. So many weapons—for what?

He had to get back to the *Molly D.* This situation was out of hand.

He turned anxiously, unlocked the inner door, and, using the hand-arm attachments of his suit, tried to pull it open.

It wouldn't move. He strained at it, and pulled and twisted. But it wouldn't budge.

Abruptly, he realized the truth. The time factor! What had been a minute for him had been hours for the *Molly D.* Long ago, it had cast off. It would now be standing by, waiting to see what would happen.

He thought of launching himself in one of the lifeboats. He even turned to manipulate the wall mechanism, started the ponderous outer door swinging and screwing shut. He was reaching with his mechanical hand for the valve that would let air into the airlock, and so equalize the pressure on the inner door. The moment the pressure was equal, the door would open.

At that point he stopped. He had a hideous thought: *Now that I'm adjusted to this zone, I won't necessarily go back to normal space. Where will I go?"*

He couldn't decide.

And besides, he thought, *it'll take time. Five minutes to close the outer door, and eight minutes to reverse the process, and launch the lifeboat.*

That would be nearly nine days outside.

He began to stiffen. For there was no turning back. He was committed to the big ship's unnatural matter and energy state, irrevocably.

IV

HEWITT grew calm and cool and grim. He was here to persuade a shipload of people to start again on the long journey to the Centauri suns.

Or, if persuasion failed, to force them.

Or trick them.

The method was unimportant. Only the result counted.

I'll have to hide, he told himself. *I can't reveal myself now, when I don't know what's going on.* Besides, surprise might be an advantage in a crisis.

He knew just where to conceal himself. Having decided where he must go, he became conscious of the distance he had to cover. That made him anxious. Swiftly, he rolled along the corridor toward the ramp.

He was within a few yards of the captain's cabin when it struck him that Warwick and the others must have been inside for a reason. They must have attacked Grayson before going down to the engine room.

There might be a guard inside, keeping an eye on the prisoner—and on the open doorway. He would have to run that gauntlet, or attack the guard.

Attack, he decided. He thought of it as an icy-cold logical decision. To be seen at this moment could be disastrous.

He manipulated the controls of one of the hand-arm attachments of the suit, raised it into striking position; and paused to fix in his mind the arrangement of the cabin.

The pause also gave him time to remember that a paralyzer could be used effectively against him even though he was in the suit. He pictured what it might do to the muscles of his eyes, cringed in anticipation; and then put it out of his mind.

Attack, regardless.

Like a charging tank, the spacesuit raced forward. The tires squealed in protest, as he whipped it around and through the door. He was all the way inside before he slowed. He was halfway across the room before he was able to stop.

He saw that Grayson was alone in the room. The captain lay on the floor, his hands and feet bound. His face was streaked with blood, and his clothes torn and twisted. His eyes were open. They stared at the spacesuit, widening.

Hastily, Hewitt backed out of the cabin and headed down the ramp. He reached the top balcony of the lower storeroom without incident. Quickly, he manipulated the release mechanism of the spacesuit.

The rubber separated with a wheezing sound. The two sections of the apparatus were driven apart to the limit of the bolts that connected them. Hewitt crawled out between two of the bolts, and a moment later stood on the floor on his own two feet.

He pushed the machine behind some packing cases, where it would not be visible from the door. And then, without taking any other precautions, he swung out onto a section of the thick fence-type wire net that held different parts of the cargo in place.

The lower storeroom—like the upper one—was seven levels high. He had come in on the seventh balcony. Using the strong, woven fence, he climbed down to the floor ninety feet below.

Now what?

He couldn't wait. He realized that. Already at least fifteen

minutes had gone by since the change. Outside, that would be ten days.

All too swiftly, it would be twenty days, thirty, forty—many months. The time ratio of 973-1 was no longer in his favor; it was against him. The proportion was so monstrously great that even a few seconds might make the difference between success and catastrophe.

He lay near the door in the shelter of a big box. It was hot and stuffy. Very little air circulated among these piles of packing cases. Tense, anxious, bathed in perspiration, Hewitt examined his situation.

It was not good. He had brought two paralyzers with him, but against a group of determined men, they wouldn't be effective. They couldn't kill. They couldn't even threaten death.

As his thought reached that point, a group of men walked noisily past the open doorway. Somebody was saying savagely, "Take these prisoners up to—" Hewitt wasn't sure, but it sounded like Warwick's voice. If that was so, then the prisoners were Tellier and the scientists who had remained loyal to him.

Hewitt came to his feet. He thought, *I'll give them half a minute to get started up the ramp. Then—* He moved over to the door and peered out into the corridor.

A guard stood in front of the engine-room door.

Hewitt drew back hastily in dismay. The man's head had been turned away, so he was still safe. But—a guard! How could he ever hope to get near the engine room?

Anger swelled inside him. What was the matter with Warwick? His side had won, hadn't it? And as far as Warwick knew, the ship was light-years out in space. From whom did he expect trouble? The man must be insane. . . .

His fury died as swiftly as it had come, as the guard shouted something. Hewitt caught only part of what he

said; he was evidently speaking to someone inside the engine room: ". . . I don't get it!"

Hewitt didn't hear the answer. There was a pause; then the guard spoke again, belligerently: "But I thought we were going to shut off the drive—"

A pause, then: " . . . letter?"

Presently he added, "So we're going to wait a few hours and see what's going on—"

Silence, then grumpily, " . . . it doesn't make sense to me!"

It made sense to Hewitt. Warwick had found the letter he had delivered to Tellier. The original purpose of the rebellion must have been to stop the ship and turn back to Earth; but he had instantly guessed the possibilities of a much swifter return to the solar system.

Hewitt groaned inwardly. *So he's going to wait a few hours!*

He felt stunned—because that was out of the question. There wasn't that much time to play around with. One hour, possibly. But not a second longer.

I've got to capture somebody, if possible win him to my side, and use him as a decoy to get near that guard.

He had to get into the engine room, and shut off that drive.

Galvanized, he edged out over the boxes, and began to climb up to the seventh balcony. It was harder going up than it had been coming down.

He reached the seventh balcony, and peered quickly out into the corridor, first one day, then the other. He didn't really expect to see a sentry. But as he turned his head, he did see—

And was seen.

The guard was Juanita Grayson.

Hewitt's first and greatest advantage was that he was

tensed, ready for action. He had told himself that, if he were seen, he would have no alternative but to attack.

He darted instantly out of his shelter. With paralyzer ready, eyes narrowed, lips compressed, he raced towards the girl.

He realized then that he had still another advantage. She was scared, and she had no training. Her eyes grew large with fright. Her hand, with the gun in it, came up shakily.

Hewitt stopped a dozen feet from her, and covered her. "Drop it!" he said. His voice was low but savage.

Her gun clattered to the floor.

She stood staring at him, and there was the incredulous beginning of recognition in her eyes. The fear changed. Stark unbelief replaced it.

She started to turn, started to run up the ramp. She staggered after three steps, and stopped. She looked back at his weapon with an expression of utter misery on her face. Slowly, she held up her hands. Standing there, she began to sway. Hewitt leaped forward and caught her as she fainted.

She was a dead weight in his arms, as he carried her rapidly back into the storeroom.

He lowered her to the floor, and blew on her eyes and into her nostrils. *Hurry!* he thought. His enormous anger was back. She *would* pass out on him at a time like this!

She stirred, and sighed like a tired child. For a few moments, then, she looked as she had when he had first seen her, not more than fourteen years old. She grew visibly older as she came awake. Her lips tightened; her face hardened; her expression grew sullen. She opened her eyes and stared up at him.

There was no fear in her now. She recognized him, and she didn't expect to be hurt. She said, "That letter—it was true!"

What startled him was the fact that she had fainted. In

spite of knowing about the letter, she had reacted to the sight of him as if his presence were a complete surprise.

He forgot that. He had his story ready, and that was all that mattered. Briefly, he described what had happened to the *Hope of Man*, how it had returned to Earth, and how in a few hours it would crash again into the planet, this time to be destroyed.

That last was true, but only in an oblique sense. Actually the sun was the danger. But she, like the others, didn't believe in that. So she had to be frightened by something that she could believe in.

He saw that she was looking at him, her eyes ever so slightly narrowed. They were brown, he saw, and hostile. "You're the person," she said in a low tone, "who made me marry an old man."

She flashed, "Don't deny it. If it hadn't been for you and your stupid ship, Mark would never have thought of marrying me."

There was some justice to her final accusation. But Hewitt had no time to discuss her problem. He cut her off. He said grimly, "Listen, the deadly thing about what I've told you is that we'll only be able to rescue three people. You help me, and you're one of them."

That caught her. Her eyes grew big. "What do you want me to do?"

"We've got to shut off the drive," said Hewitt. "That's first. If we don't, the ship will crash. You've got to help me capture the guard at the entrance to the engine room."

Her eyes flashed with scorn. "I know who that is. One of those crackpots, always spouting morality at you. But I'll decoy him. He joined us, didn't he? That shows he's no better than the rest of us."

It only showed that one of the religious visionaries had found the voyage drab. And so he had reinterpreted his

dream about the sun destroying the earth, and fitted it in more closely with his current desires.

Hewitt helped the girl to her feet. "Let's go!" he said. "You first."

As he followed her down the ramp, he wondered which of the three "crackpots" was on guard. For the life of him, he couldn't recall what the sentry guarding the engine-room door had looked like. His one glance had been too quick for any identification. There had been a plump, genial individual named Mackarett, a younger, ascetic-looking man whose name was Rand, and a dark, intense person who called himself Andrew Sincere.

It turned out to be Mackarett, a little thinner, a little more sober-looking—and quite gullible. When Juanita shouted at him from the ramp, "Mr. Mackarett, quick—come!" he raced towards her.

When she turned and disappeared up the ramp, he followed her.

Hewitt was waiting around the first turn.

For a bare moment, the man acted as if he were going to fight, despite the gun that pointed straight at his face. His lips parted in a snarl. He started to bring up his weapon.

Abruptly, his arm seemed to grow weak. His eyes glazed, and appeared to turn inward. He looked like a visionary seeing a very unpleasant vision. He mumbled, "Mr. Hewitt, that letter—"

That was as far as he got. At that point, Hewitt stepped forward and deftly removed the automatic pistol from his nerveless fingers. That seemed to shock Mackarett even more. It was as if a momentary hallucination had come alive and touched him. The effect was out of all proportion to the reality. He collapsed to the floor, and lay there twisting and turning. Finally, his mind must have started working again. He looked up.

Before he could speak, Hewitt said, "Mackarett, there's no time to waste. Listen!"

He told the same story he had told Juanita. Only three or four people could be taken off the ship immediately. The rest would have to stay aboard, wait for the ship to slow down, and then come back the long way.

He finished, "You've got to help me get into that engine room, and shut off the drive. Right away!"

Mackarett mumbled, "But Mr. Hewitt, Warwick is at one of the airlocks. He's launching a lifeboat. He—"

"Now?" said Hewitt.

"Yes, sir."

The first shock passed. Hewitt stiffened to an examination of the possibilities. With Warwick out of the way, his main opposition would be gone.

One thing seemed certain. Warwick would not find himself in normal space, adjusted to Earth. That process appeared to depend on a series of unbalancing effects within the electronic and atomic structures of the affected object. A series, not just one; it had taken three entrances to do the job for Hewitt.

He pictured Warwick forever caught into slow-time, and unaffected by the gravity of the Earth. He would have to use intricate machines to adjust his body to the complex velocity of Earth through space.

He couldn't do it. He would die.

Hewitt was pale as he turned to Juanita. In a sense one man's life didn't matter. In a few months of outside time—*hours here*—the entire population of the planet of man's origin would die in a holocaust of heat. Even the outer planets would be engulfed by waves of super-hot gases.

Believing that he still hesitated. It was not easy to say, *"This man must die, so that we can live!"* Twice he parted his lips to say, "Damn Warwick!"

He didn't say it. Instead, he asked, "Is anyone going with him?"

Mackarett said, "Oh, he's not going himself. He's sending Tellier and one of the other scientists."

Hewitt swore.

That settled it. If he had hesitated about his enemy, he could not possibly be responsible for ensuring the death of a man who would be his ally.

"Juanita!"

"Yes?"

"I want you to go upstairs, and see when they come back. Stay on the ramp, and just peek out, so you won't be seen. The moment the lifeboat noses back into the airlock, rush down here and tell me!"

He added, "And if he isn't back in fifteen minutes after you get up there, come back and tell me anyway." At that time he would have to make up his mind. He ended, "Will you do that?"

"Yes." But she did not move. Her face was white.

"What's the matter?"

"What are you going to do?" she demanded.

"Mackarett and I are going to seize the engine room."

Still she hesitated. There was misery in her eyes. Hewitt said, "Honey, please hurry. . . . What's the matter?"

"Are you sure you're going to take me? I'm *going* to be one of those who gets taken off with you?"

"You're first," said Hewitt. "I swear it!"

Tears came to her eyes. "I'm ashamed!" she whispered. "I don't want to be a deserter. But I've got to get off this ship."

Hewitt said, "Hurry, please! If we don't make speed, nobody will get away!"

Her shame did not prevent her from starting off at a run.

To Mackarett, Hewitt said, "How many men are there in the engine room?"

"Two."

Hewitt broke open one of the automatics and, while Mackarett watched, removed all but one shell from the magazine. Silently, he handed the weapon over.

Mackarett accepted the gun warily. "Am I also going to be rescued?" he asked.

Hewitt sighed. Ever since he had come aboard, he had felt as if he were moving in quicksand. It was the old story of human beings intent on themselves, resisting the larger purposes of others.

Men were hard indeed to save from disaster.

"Absolutely." He spoke the falsehood firmly.

"What about my wife and child? Can I take them along?"

Hewitt had been turning his mind away. The question caught him unprepared. Unaccustomed to lying, he was momentarily flustered. He had forgotten that a man would think of his family first.

For a fateful moment he hesitated, trying to think what this would do to his hastily fabricated story. He said at last, lamely, "Yes, they can come too."

Mackarett flashed, "You're not sure. You didn't answer fast enough."

Hewitt was beginning to recover. He said frankly, "You can see how I've been operating. I came aboard this ship, and found a revolution in full swing. I had to act fast, but I'm handicapped by the fact that I can offer rescue to three, possibly four people—I think four can be managed. I don't really care who they are, but in each case it's got to be someone who helps me. Now you come along and say, my wife and child, also. Let me be blunt. To me, only one thing matters. The drive *has* to be shut off."

He was feeling much more confident now. He went on, "Why not leave your wife and kid here? They'll be all right. But I need those two vacancies to offer as bribes to the men in the engine room."

Mackarett said, "If we can capture those two men, so that no promises are necessary, then can I take my family?"

Under his breath, Hewitt cursed the man and his conditions. He had limited his lie as to how many could be rescued, because that was the only way he could put on the pressure. Now, he was being forced to use up his reserves faster than he had intended. But this was the critical moment.

He said, "Absolutely. I promise, on my word of honor."

He was sweating with anxiety. "For their sake, man! We're wasting time. You don't realize how many hours are going by outside. Hurry, for heaven's sake!"

Mackarett said, "I'll take your word."

V

THE PLAN was for Mackarett to signal Hewitt when the crewmen were off guard. Before they could get over their surprise—or even be sure they were really threatened—Hewitt would rush in. Swiftly, the two men would be disarmed and tied up. And thus, in a few moments, the engine room would be conquered.

It was far indeed from being a perfect strategy. It involved risks—which he dismissed even as he thought of them. Its great merit was surprise.

It's got to work! he told himself.

It did.

When the two crewmen—Pratt and Leichter—had been tied up, Mackarett took up his position as guard outside the door, and Hewitt set up the device that would automatically shut off the pile.

Presently, uneasily, he went to the door where he could see Mackarett. "No sign of her?" he asked.

Mackarett shook his head.

Dissatisfied, Hewitt returned to his position at the pile. A dozen times, then, he fingered the lever that would begin to shut off the power. But each time he withdrew his hand.

He knew what it was. In spite of his conviction that all means were justified, actually he could not knowingly be responsible for the death of another human being. The very extent of what he had done, and tried to do, during the past ten years, showed how strong was his motivation in that direction.

He had an obsession to preserve life, not destroy it. He could lie, steal and cheat for that purpose, but he could not kill. The pressure of that was so powerful that even to think of fighting it was to realize how hopeless such a fight would be.

Restlessly, he went again to the door. Mackarett saw him and said, "What's keeping that girl? She's driving me crazy!"

But he did not suggest that the pile be shut down, anyway. It struck Hewitt that this odd individual, who had come on the voyage because of some kind of hallucinatory experience—this man also did not think of dealing death to others to gain his own ends.

Even Juanita, embittered though she was, still little more than a teen-ager, had suffered a qualm of conscience.

Thought of the girl reminded him that she had left Grayson. He shook his head, uneasily. It was unfortunate. She would have to make a choice between two men—Grayson and himself. Every woman on this tremendous journey would have to bear children.

Mackarett said, "Here she comes!"

Hewitt jumped, and went back to the instrument board. He stood, waiting.

In a moment he would have to make up his mind. Tensely, he hoped that her news would be that Tellier was back.

He heard Mackarett speak to the girl. Then there was silence. Juanita said something Hewitt didn't catch, her tone was so low. Then more silence.

Hewitt was astounded at the delay. Didn't these two *realize?* He turned toward the door, and shouted angrily, "Hurry up! For heaven's sake!"

At that, she came through the door. Her face was the color of lead. Hewitt, on the verge of yelling at her again, swallowed his anger. "What's the matter?" he asked.

There was a sound at the door. For a fateful moment, Hewitt glared over the girl's shoulder at the men who were plunging into the room. Then, in a spasm of energy, he tried to do three things at once.

He started to turn back to the control board. He grabbed awkwardly with one hand for the lever that would shut off the drive. With the other hand, he clawed at his own weapon.

A paralyzer beam caught him in the shoulder, with all his actions still unfinished. He went down, cursing, his muscles twitching. He heard the clatter of his own paralyzer on the floor. Somebody kicked it out of his reach.

Through a blur, he saw Juanita Grayson. "I'm so sorry!" she sobbed.

She was cut off by Warwick, harshly. "What are you sorry about? You didn't do anything." He turned to Hewitt with a sneer. "I saw her peeking around the corner of the ramp, and there was something about her that made me suspicious. I got it out of her, by heaven!"

Hewitt groaned inwardly. It was an old, old story. Too many people were not just weak or strong of character. They wavered between the two. And it always showed.

As a result, his cause was lost, unless—

A few minutes later, Warwick said violently, "What do

you mean only four can be rescued? Do you take me for a simpleton? If four, why not forty? What are you trying to pull off?"

He was a blond young giant with sea-blue eyes. His face was twisted with suspicion as he went on: "Listen, Hewitt, I don't get what's going on. Tellier was out just now in the lifeboat. He practically had to use a telescope to see our sun. We're just about half a light-year from Proxima Centauri. This ship must be in both places at once for you to have got aboard. Is that the explanation?"

"It's the zone—" Hewitt began. He broke off. "Proxima is *that* close?"

Not for the first time since the *Hope of Man* had come back to the Earth's atmosphere, he felt staggered. His picture of the "zone," never very clear, suffered another change. He had found it difficult, it not impossible, to imagine a "zone" actually traveling far in excess of the velocity of light. And yet, the indications were that the speed had been light-years in a day—which only made it more difficult to think of it as "speed" or "movement."

Most of the evidence seemed to be in now. According to Grayson's logbook, the ship had ceased registering acceleration at 177,000 miles a second. That fitted with the one-to-three telescoping effect he had observed when he first came aboard.

It didn't fit in with a 973-1 atmospheric pressure difference. It didn't fit with the matter density that had enabled the ship to penetrate the Earth's crust. Those more spectacular phenomena could only have occurred normally at a velocity so close to that of light-speed that the difference would be hard to measure by any known methods.

Was it possible the *Hope of Man* had continued accelerating in the zone? That might account for the fact that it was acting as if it were traveling at two different speeds at the same time.

On that basis, assuming the existence of the "zone," it was possible to conceive of the *Hope of Man* "simultaneously" occupying a position in normal space near the Centauri suns, and, four light years away, another position in the zone.

It would not, of course, be in two places at the same time with respect to the same observer. According to Einsteinian physics, there was no such thing as identical instant of time for more than one observer. To Hewitt, the ship was—or had been—in the solar system. To the people aboard, it was out in space.

Hewitt shook his head wonderingly. "But if that's how it is," he said aloud, half to himself, "it would mean—"

He caught himself, and pleaded, "Warwick, shut off the drive! Even as we talk here, hours are going by outside."

Warwick was cold. "You can't fool me. It'll be at least a year before the Earth's orbit could again intersect the orbit of the ship. In the letter—which you swear to—you say the ship is only traveling at ten miles an hour. At that speed, it can't catch up with the Earth, which moves through space at around eighteen miles a second."

He ended angrily. "What have you got to say to that, Hewitt?"

Hewitt said, "While you were talking, fifteen hours went by. Man, man, use your head."

He felt hopeless. At this final hour, he was up against the wall of another man's ignorance. Warwick's training was so limited, it did not strike him that the ten-mile apparent speed was *in addition* to Earth's orbital velocity. Explaining the details to Warwick could only lead to more questions. Nevertheless, Hewitt made the attempt.

When he had finished, Warwick said stubbornly, "I know what you've got on your mind. That stupid sun business,

Well, don't think we're giving up our chance to get off this ship!"

It was the reaction Hewitt had expected: unthinking, concerned only with the man's own desires. Mentally, he gave Warwick up. No more scientific explanation. This fight was on a different level.

He said grimly, "Warwick, I'm the only man who knows how to get you off. I'll do it when you cut off the drive, not a second before."

Warwick persisted, "But you admit there's no immediate danger of plunging into the earth?"

It would happen in two hours, ship time. But long before that—in little more than an hour—the sun horror would take place.

The impact of that made him raise his voice. Loudly, he called out to the others—both men and women—gathered in the corridor: "Stop this madman! If you listen to him, you'll be dead in forty minutes!"

That was a lie, but he had to have a few minutes leeway.

There was a stir. Several woman looked uneasy, and tugged at the arms of their men. Hewitt saw Tellier under guard standing in the background. He called to the physicist in a piercing voice: "Tellier, when you were outside, you saw the Centauri suns nearby. Is that right?"

"Yes." The physicist spoke in a low tone.

"In your estimate how long will it take us to get there?"

"It'll take us about three months to slow down. Then a few weeks while we maneuver for a landing."

"That's normal time. With the time-contraction effect, part of that slowing down will seem only a half or a third as long?" That was only a guess.

Tellier hesitated. "That's about right."

Hewitt whirled on the group. "Think," he said, "you're only about two months from your destination. Surely after all

this time, you won't give up when there's so little more time to go."

He saw that Warwick was about to speak. He rushed on: "Don't give up now! In less than eight weeks you'll be landing on a planet that will belong to you. And all the stuff aboard this ship, millions of dollars worth of material—yours, if you land!"

Warwick yelled, "Folks, it's the old sun-explosion nonsense that's driving him! If we slow down now, it'll take us four years to get back to Earth!"

Hewitt said earnestly. "It isn't as if this were an ordinary old-style colonizing expedition. We have tools and equipment, advanced machinery. Most of you will live better than you ever did on Earth!"

He went on before Warwick could speak: "What you don't seem to realize is that you rebelled in order to stop the drive. You risked your lives to do that. Now, one man among you has decided to prevent you. Are you going to let him? You have a right to make up your own minds. Don't let one man dictate to you!"

He stopped. Warwick was drawing an automatic. The man had a twisted smile on his face. He faced the group squarely, a big, arrogant, determined man. He said flatly: "I tell you, the only danger that Hewitt has in mind is from the sun. He's insane about that. You folks stick with me, and you'll be on good old terra firma in less than a day."

He waved his gun menacingly. "And now, if anybody wants to make trouble just let him step forward—"

No one moved. Hewitt shouted, "Don't let one man cow you. I tell you this is life and death—"

A fist that seemed to be made of iron caught him in the mouth. He half-fell, then recovered. Dizzily, he looked up into Warwick's face. The big man spoke from between clenched teeth: "Any *more* troublemakers?"

There were none. The tight smile was back on Warwick's

face. He said in a silken tone, "You'll be living up in the crew's quarters from now on. If we have to go back the long way, believe me, you won't enjoy the trip. If you're so much as seen down at this level, you'll get a bullet where it'll do you the least good."

He turned to Mackarett. "You, too!" he said.

The plump man started to protest, but Warwick cut him off. "Get!" he said.

As they headed for the ramp, Hewitt was already bracing himself. The choice, it seemed to him, was perfectly simple: Die now, or an hour from now!

He turned to Tellier, who was just behind him. He asked tensely, "When you were out in the lifeboat, did you have a hard time keeping up with the *Hope of Man*?"

The physicist shrugged. "It took all the power we had. Mr. Hewitt—" earnestly—"you cannot imagine against what resistance the *Hope of Man* is maintaining its velocity. And the lifeboat had to contend with the same resistance."

Hewitt, who had seen the relevant instruments, could imagine only too well.

He saw that the ramp was only a score of feet away. He said hastily, "Which airlock did you go out of? One or two?"

"Two."

Less than a dozen feet to go. He had the information he needed. But there were more questions in his mind.

"Tellier, what in your opinion will happen when the drive is shut off?"

The answer was prompt. "On the basis of what you said in the letter, and what I've heard you say, my opinion is that the ship will immediately revert to its position in normal space. That is, near Centaurus."

Hewitt drew a deep breath. "Tellier," he said, "why didn't you shut off the drive, as we asked you to do in the letter?"

The scientist stared at him. "You didn't give us time," he said. "Why, I'd barely finished reading it when—"

He stopped. He had lost his audience.

They were at the ramp.

The guard who had been ahead of them, stepped aside and partly blocked the ramp that led down. He motioned with his automatic. "Up!" he said curtly.

Hewitt started forward obediently, then turned and kicked the man in the stomach. It was the cruelest blow he had struck in his life. The guard doubled up with a cry.

Hewitt plunged down the ramp. A bullet screamed past his ear, struck the wall. Then he was around the curve of the spiral, temporarily safe. Behind him, he heard Warwick shout: "Phone the engine room! Shoot him in the legs!"

He wasn't going to the engine room.

"... damn you, Tellier! Get out of the way!"

That was the last he heard, but it gave him a picture of Tellier blocking pursuit for just those vital few seconds.

He reached the corridor on which was the entrance to the seventh balcony of the lower storeroom. At a dead run, he headed for it. *If I can make it,* he was thinking, *without their seeing me, they'll keep on going down—*

He made it. And still he forced himself to new exertions. With every ounce of strength left in his body he ran towards the spacesuit, where he had left it a seeming age before. Panting, he crawled between the up-ended bolts and scrambled onto the saddle. His fingers trembled as he pressed the button that started the upper section of the suit sliding down to join the lower. The two rubber linings squeezed together, and became air-tight.

He had a monster in his control now. Out into the corridor he raced, and towards the ramp. A crewman on the way

down stopped, teetered on one leg, and then raised his automatic.

He fired one bullet. It jangled against the armored suit. The next second, with a yell of alarm, the man was flattening himself against a wall. Hewitt maneuvered past him, and raced on up the ramp to the airlock corridor.

Amazingly, it was deserted. Women and other noncombatants must have been rushed up the ramp when the shooting started. And Warwick and his men had followed him down. They'd be back—long before he could do all that he had to do. But for perhaps two minutes there would be no interference.

At top speed, Hewitt raced towards the airlock number two, the one Tellier had used. He paused for seconds only. He took time for one action. He pressed the button that started the great outer door unscrewing.

He didn't wait for the door to open, but wheeled around, and headed for airlock number one.

And now he was where he wanted to be.

First, he opened the door of the lifeboat. Then he activated the mechanism that started the inner airlock unscrewing. At that point, three men appeared at the head of the ramp. One of them was Warwick, who shouted: "Hewitt, you can't get away. We'll blast you with paralyzers."

But it was an automatic he held in his own hand. And it was an automatic that each of the other men carried. Seeing them, Hewitt felt an almost insane sardonic glee.

He guessed that these men had deliberately armed themselves with guns, because bullets could kill. Paralyzers could only incapacitate.

And now, for possibly another minute, they could do nothing against him.

The inner door was still unscrewing.

It swung ponderously as he watched. Hewitt swung his

suit into the lifeboat and set in motion the launching mechanism.

Automatically, the lifeboat rotated down on its launching arms, and rolled forward on a long line of rubber rollers that lifted up from the floor. It was propelled forward and into the lock.

When it was all the way inside, the inner door swung shut behind it.

Everything was automatic now. The process could no longer be stopped.

The air sighed as it was sucked out of the lock. Even before that noise faded, there was another sound. The great outer door—which had, by normal time, taken them more than four days to open—began to unscrew. Within minutes, as it had been built to do (it would still, of course, be hours, relative to Earth) it swung out and to one side.

The lifeboat radio clattered into life. "Hewitt," roared Warwick's voice, "you can't escape that way—you'll have to come back as Tellier did. If you leave the ship, we won't let you back in. You'll be stranded!"

Hewitt set the controls so that the outer door would remain open, if it was not interfered with. Then he launched the lifeboat.

And still he was only at the beginning of what he had to do.

And all he had was a theory.

As the lifeboat emerged from the lock, he turned its nose in the direction of flight, and adjusted the pile to nine-tenths of its potential. The small boat seemed to freeze in space; it held its position beside the yawning opening of the lock.

Carefully, he turned it around, and eased it back into the airlock.

Once!

For five seconds, by his watch, he let it rest there. Then he let the rollers launch it backwards.

That was easier. He could use the powerful backward thrust of the drive to edge it out. Almost the instant it was outside, he set the power.

Just in time. He felt a dizziness, an unmistakable sensation. For a bare moment he was not in control of the lifeboat. Then the feeling passed, and he pushed the boat's nose back into the airlock.

"Twice!" He spoke the word aloud.

Again, he waited five seconds, and then once more launched the lifeboat. As it moved clear of the opening, the great outer door began to swing shut.

Involuntarily, Hewitt called out, "Warwick, don't!"

There was a senseless series of sounds from the loudspeakers. With a sinking sensation, Hewitt realized the truth. Radio waves were already distorted. He had time to see that the door was too far shut for him to control, and then—

Two things happened at once. He applied power, so that the lifeboat would start to circle the big ship. As he was drawing clear of the controls, nausea struck him like a blow. The pain left him gasping, but it passed again almost as swiftly as it had come.

When he could see again, he thought, *I've got about fifteen seconds before the second wave of pain. If I can get into airlock number two before the final change takes place—*

Through the forward porthole, he saw that he was high up above the *Hope of Man.* He saw something else. It distracted him—just for a moment it held him.

He saw three points of white light, and one red. Two of the points were like jewels held close to his eyes, pinpoints in size, but so bright they dazzled him.

He thought: *The Centauri suns!* No longer did they look like one bright spot as seen from the southern hemisphere of Earth. They were separated now into four distinct bodies: Alpha, Beta and Gamma, and red Proxima.

Here they were, his hope for the future of man, the

famous, nearest star system, only four and one-third light years from Earth.

So close, so wonderfully close . . . And then he shook his head in astonishment. For in some kind of a negaspatial zone, this ship was visible at "this" moment only a few thousand miles above the surface of Earth.

He forgot that. For there ahead and to one side was the opening of airlock number two.

And it was open.

His foresight was justified. They had seen him only at airlock one. And so they hadn't suspected that he had also set in motion the opening mechanism of airlock two.

He guessed that he had seconds left. With utter concentration, he nosed his lifeboat into the lock, jabbed hard at the keys that started the outer door closing, and set in motion the whole process of entering.

Whatever he did now would save him hours—when the change came.

His good fortune, then, was that the outer door was actually beginning to screw shut, the air beginning to come into the lock, the inner door beginning to unscrew—when the blackout of the change struck him with all its terrible impact.

As a result, he only had to sit there thirty hours, before, with his 973-1 time-ratio advantage, he took full control of the *Hope of Man.*

Averill Hewitt stepped gingerly down to the soil of Earth from the patrol boat that had ferried him down from the *Hope of Man.* He had come back alone. Nearly ten years had gone by on Earth.

He started to push through the crowd of reporters assembled at the landing field. Then he realized he was not going to be allowed to escape.

He stopped, and smiled. He said, "I had the patrol boat

commander radio ahead for old newspapers that would describe what happened to the sun. Did anybody bring one?"

"Here! Here!"

Several papers were held up, and passed forward.

Hewitt accepted them, and sat down on one of the landing-field benches. He said, "I'll answer no questions till I've read this."

More than nine years before, about one week before his predicted Nova, the sun had suddenly increased in size about twenty per cent. Simultaneously, its temperature had gone down more than three thousand degrees.

For fifteen hours its paler light shone upon an Earth that was scarcely affected. It was as if a mist had come up in the atmosphere, blocking off the heat, or as if a partial night had fallen. The planet remained warm inside its envelope of air. The great waters and the thick crust retained their heat, and so absorbed the titanic shock of the sudden reduction in the sun's temperature.

In time, of course, all that accumulated warmth would have drained. The oceans would have frozen, the land chilled; and an ice-laden planet, virtually lifeless, would have resulted.

At the end of the fifteen hours, the sun began to shrink. The temperature went up. In six hours it was normal. There had been no change since.

Hewitt said, "It probably won't happen again for millions of years."

He put the papers aside, stood up and went on, "I have learned a lot about the behavior of matter and energy. I think I can explain why the sun reacted otherwise than I predicted."

He paused, and took a deep breath. He had been intent on the newspapers. For the first time, he saw how vast was the crowd that had come out to meet him.

Radio microphones were closely grouped around him.

Television cameras pointed at his face. It startled him a little to realize that he was famous now, not notorious. Something had happened to the sun—not what he had predicted—but something tremendous. It justified all that he had done, the expedition to Centaurus, the methods he had used aboard the ship—everything.

He *might* have saved the human race. Actually the truth of what had happened was far more startling than they realized.

He began, "The universe is more complex than anything we previously dreamed. The solar system, in its movement through space, periodically enters spatial "zones" that differ one from the other. At the time I made my prediction, our system had apparently just entered such a zone. The imbalance that started then took years to reach a critical point. I predicted that point on the basis of mathematics that examined the functional behavior without being aware of the cause. I thought the changes applied only to the sun.

"They didn't. The earth and all the other solar planets were affected also. And when the critical moment came, the earth—because it had entered the zone before the sun—was changed first.

"During that time, *the sun did not cool.*

"All the physical changes took place in your bodies and in the earth. And when the sun finally seemed to return to normal, it was actually flaring up as I originally predicted it would.

"It was being affected by the zone, fifteen hours after the earth itself had entered the zone."

For a moment, when he had finished, he looked grimly around his audience. Then slowly, he began to relax.

He regretted nothing. No one was happier than he over what had happened. During those years on Centaurus, he had struggled with the others to build the foundations of a great new civilization. He and Juanita, with their four

children, had helped insure that man would survive any disaster that might now, or ever, strike the solar system.

Now that all was well, he was back for more colonists. Three planets, two passably hospitable, one a veritable paradise, waited for the pioneers.

Standing there, with the world listening, he launched into his sales talk.

THE STAR-SAINT

As he passed the two women in the corridor of the spaceship Colonist 12, Leonard Hanley heard one of them say:

"He was on the far side of the galaxy, and came here when he heard about our trouble. He doesn't need spaceships to travel, you know . . ."

Hanley walked on, cynical and annoyed. As leader of the colonists, he'd been advised two hours before by Captain Cranston that Mark Rogan had arrived. The commanding officer's memo had stated, among other things:

"Since we will reach the planet Ariel, our destination, within half an Earth day, we are fortunate that the Space Patrol's great alien communications expert was available to help us. Mr. Rogan's presence means that you and your people can make your landing at once, regardless of what may have happened to the first settlement . . . and the ship can leave."

The reference to the ship departing immediately made Hanley grim. "Oh, no, you don't, Captain," he thought. "You're not leaving till we find out what's happened down there."

He continued along the corridor to the radio room, looked

in through the window, and saw that the operator on duty was a young man named Farde. "Anything new?" Hanley asked.

The operator turned lazily. His manner had just enough insolence in it to be irritating, and just enough deference to make it difficult to take offense.

"Same old repetition of our messages," he said.

Hanley hesitated. Time had been when he had tried to break down this barrier between crew and passengers. He'd felt that, in a long, two-year voyage, there shouldn't be constraint or hostility. Yet, in the end, he'd given up. To the crew members, the eight hundred colonists—men, women and children—were "emigrants." They had no lower term applicable to human beings.

Hanely, who was an engineer, and who had been a university professor, had often thought the crew members were not a prepossessing lot.

Once more, he hesitated, remembering the two women who had gossiped in the corridor about the mysterious Mark Rogan. He said casually "We were lucky to get hold of Mark Rogan."

"Yes."

"When," asked Hanley, "did he first get in touch with you?"

"Oh, that wouldn't be through here, sir."

"How do you mean?" Sharply. "Don't you get all radio messages here?"

"Well—yes, in a sense." The operator hesitated. "Fact is, Mr. Rogan doesn't answer regular calls. You broadcast your problem. He comes only if he's interested."

"He just arrives, is that it?"

"That's correct."

"Thanks," said Hanley in a subdued voice.

He was quietly furious as he walked on. The set-up

shrieked of the phoniness of a man who allowed people to believe that he was supernormal. So he didn't use spaceships to travel through space! And he helped only if something interested him!

Hanley's anger subsided abruptly. It struck him with a shock that Rogan's coming had sinister significance. Because he *had* come.

Hanley reached his own apartment; and Eleanora, his wife, was serving lunch to himself and the two children when a wall communicator switched on, and a voice announced:

"Attention, all passengers and crew. We are entering the atmosphere of Ariel. Captain Cranston has called a meeting in the auditorium for one hour from now to discuss the landing."

Hanley sat awkwardly in a chair on the auditorium platform, and uneasily watched the angry colonists. It seemed hard to believe right now that they had elected him their leader. For he realized they must land regardless of the danger on the planet below; and that was a reality that most of the colonists did not seem to be facing.

They were shouting furiously, shaking their fists at Captain Cranston, who stood at the front of the platform. The roar of their voices filled the small room, and echoed from the halls beyond, where other people crowded, listening to the loudspeaker.

Despite his own tension, Hanley kept being distracted by the stranger who sat in the chair beside him. Rogan, he guessed. It could be no other on this ship, where everyone knew everyone else.

Even without his foreknowledge, there would have been reasons for noticing the man. Rogan was slim of build, about five feet ten inches tall; and Hanley had heard him say something to Captain Cranston in a voice so soft, so gentle, that he had felt a thickening of dislike in his throat. The stranger

had eyes as green as emeralds, an unusual color for a human being.

With a faint distaste, Hanley turned away from the man and studied the viewing plate at the rear of the platform. It was quite a large plate, and a sizeable area of the ground below was visible on it.

The picture was not clear at this height, yet it was sharp enough to show green vegetation. To the left was the silvery gleam of a winding river. To the right were the ruins of the first human settlement on the planet Ariel.

Hanley studied the scene unhappily. As a scientist and administrator, he felt no personal fear at anything that might develop below. But when he thought of Eleanora and the children, his feelings about the landing became mixed up.

The audience quieted at last. At the front of the stage, Captain Cranston said: "I admit an unfortunate situation has arisen. I cannot explain how, on an apparently uninhabited planet, a human colony has been destroyed. But I must land you. We haven't enough food to take back such a large group. I regret it, but here you are and here you must remain. But now—" he half turned— "I want to introduce you to a man who came aboard ship today. Mark Rogan, one of the great men of the Space Patrol, is here to help you. Mr. Rogan, will you come over there to be introduced. And you, also, Mr. Hanley."

As Rogan came up, the officer said, "Mr. Rogan, please say a few words to these unhappy people."

Rogan looked at them for a moment, then smiled, and said in the same gentle voice Hanley had already heard:

"Folks, everything will be all right. Have no fear. I've listened to these radio repetitions, and I feel confident that in a day or so I'll be able to give you the signal that means safe landings."

He stepped back. There was dead silence; and then all over

the auditorium women sighed. Hanley, who had listened in amazement to the sugary reassurance, stared at the audience, baffled. Anxious, too. He had heard Mark Rogan had an unsavory reputation where women were concerned.

Captain Cranston was speaking again, conversationally: "Len, I want you to meet Mark Rogan." To Rogan, he said: "Mr. Hanley is leader of the colonists."

The vividly green eyes seemed to study Hanley's face. Rogan smiled finally, and held out a slender hand. Hanley grasped it grudgingly, and instinctively squeezed hard on the long, tapering fingers.

Rogan's smile sharpened slightly, and he returned the pressure. Hanley felt as though his hand had been caught in a vise. He turned pale with the pain of it. In agony, he let go. Instantly, the other's grip relaxed also. Momentarily, thoughtfully now, the green eyes examined him again. Hanley had the unhappy conviction that his enmity had been evaluated, and that he had lost the first round.

Captain Cranston was facing the audience. "Ladies and gentlemen, the exploratory landings will be made by armed craft under the joint command of Mr. Rogan and Mr. Hanley. There's still time for a descent today, so let's make our preparations."

Into the crewboat Hanley loaded a walkie-talkie, a Geiger-counter, a ground radar instrument, and a gadget that could make vibrations all the way from sound waves through the ultra-sonic range on up to short wave radio.

From the corner of one eye, he saw Rogan coming along the corridor. He turned away hastily, then—as quickly—looked again. And his first impression was right. The man wore slacks and a shirt that was open at the neck. His pockets did not bulge with gadgets. His hands were empty. He carried no visible equipment.

Rogan nodded a greeting which Hanley curtly acknowl-

edged. As Rogan stepped into the crewboat, Hanley thought satirically:

"At least he's condescending to travel by ordinary transportation."

It was about ten minutes later that the small craft came to rest in the middle of the desolation that had been a settlement of one thousand people.

As Hanley climbed shakily to the ground, one of the crew members said: "The place looks as if it's been worked over by a bulldozer."

Hanley had to swallow as he stared at the shambles. Somebody, or something, had gone to a lot of trouble. The buildings, which had been made of field stone, where so thoroughly demolished that even the individual stones had been scattered. Here and there, grass was beginning to grow again. Except for that, and except for a few large trees, as far as he could see, the land had been ploughed raw as if by a gigantic scraper.

Hanley strode forward, stumbled over something, looked down, and drew back hastily. He had stepped on what was left of a human being. The flesh and bone had been ground into the soil.

He saw now that there were bodies all over among the wreckage. It was not always easy to make them out. Many of them seemed a part of the ground, so completely had they been smashed, and pushed in, and covered with dirt.

Frank Stratton, a young colonist, came over and stood beside him. Hanley turned and called to Rogan:

"I think we should take a quick look over this territory, Mr. Rogan. How about you and me walking down by the river, while Mr. Stratton and—" he named a colonist technician—"go into those hills. The others can pair up to suit themselves. No directives to anyone. Just report what you see, and turn back in two hours or less."

Hanley didn't wait for agreement, but hurried over to the crewboat. It would be unusual for the two leaders of a group to go off together, but he was determined to see an alien communications expert at work. In the back of his mind he had already decided to try to solve the problem himself, without help from the "expert."

He lifted his pack of instruments out of the boat, and slung it over his shoulder. The weight of the load made him stagger, but he leaned into it; and presently Rogan and he were walking away from the shattered remnants of the settlement. Hanley was surprised that the other had yielded so readily to his suggestion. He noticed that Rogan kept looking into the sky, and only once or twice paused to study the ground.

The hard, gravelly soil gave way to smooth, lawn-like grass. The stones and boulders that had been everywhere around the destroyed village, disappeared. They came to the first considerable grove of trees. Some bore fruit. Others were blossom-filled. A sweet fragrance permeated the clear, warm air.

They reached the river, a wide stream that flowed with an oily slickness suggesting depth and speed. They followed a natural pathway along the foot of an ever steeper shore till finally the bank was a hundred foot high overhanging cliff. From ahead, now, came the roaring sound of water tumbling over falls.

Rogan, who was slightly ahead, paused; and Hanley chose the opportunity to lower his heavy pack and set up his instruments. The Geiger-counter had not clicked once, so he laid it on the ground out of the way. He spoke briefly into the walkie-talkie, and it roared back at him a babble of signals.

It was not a pleasant feeling, listening to that confusion of calls. Aboard ship the effect had been eerie. Here several miles from the village, it gave Hanley a queasy sensation.

He was suddenly dissatisfied with their position. "Mr.

Rogan," he called, "don't you think we're in a rather vulnerable spot?"

Rogan did not turn, nor did he show in any way that he had heard the question. Hanley flushed and, abruptly furious, walked over to him. "We'll have this out right now!" he thought.

As he came up, he saw that the other was staring down at a small area of sand. It reminded Hanley that Rogan had paused twice previously, and both times had looked at similar patches of sand.

The discovery briefly drained Hanley's anger. He had been looking for a pattern in Rogan's activity; and here it was. He stopped, and studied the area. It looked like ordinary sand, a grayish yellow-brown in color, quite unassuming, and about as unlikely a source of life as anything he had ever seen.

Hanley hesitated. He wanted to ask questions, but the man was so discourteous that he hesitated to expose himself to further insults. He half-turned away—and then saw that Rogan was looking at him. Rogan said in his soft voice:

"Mr. Hanley, I sense in your attitude that you spoke to me a short time ago, and that you are incensed because I did not answer. Is that correct?"

Hanley nodded, not trusting himself to speak. The wording seemed to imply—he couldn't decide, but it re-stimulated his anger. "Sense in your attitude," indeed. Was Rogan trying to suggest that he had *not* heard the words? Hanley waited, fuming.

Rogan went on, "I find myself in this situation so often that, for the most part, I do not bother to explain it any more." His green eyes glowed as with a light of their own. "However, since it may be necessary for us to cooperate in the coming crisis, I ask you to believe me when I say that I do not hear when I am concentrating. I shut off all extran-

eous phenomena." He finished gently, "If that statement violates your sense of reality, I'm sorry."

Hanley said grudgingly, "I've heard of such things. Hypnosis."

"If you need a label," said Rogan, and his tone was almost indifferent, "that's as good as any. But, actually it is not the answer."

Belatedly, it struck Hanley that the other had made an effort to be friendly. He said quickly, "Thank you, Mr. Rogan, I appreciate the explanation. But would you mind telling me, what are you looking for in that sand?"

"Life." Rogan was turning away. "Life is so simple a state that it is generally not even thought of as such. You see, Mr. Hanley, every planet has its own initial life-process, the state where inorganic matter and organic are almost indistinguishable. This process goes on continuously; and it is the building block of all subsequent life on that particular world. I cannot prove this to you. There is no instrument I know of except my own brain for detecting its existence. You will not immediately realize to what extent that fact rules my actions. And so, I suggest that you do *not* start feeling friendly toward me because I have made this rather involved explanation. You'll probably regret it."

Hanley, who was already disposed to be more friendly, felt uneasy. It seemed clear that Rogan meant exactly what he had said.

He saw that the man was looking at the sand. Hanley turned, and strode back to his instruments. He thought: "After all, I ought to be able to locate the larger life forms without knowing anything about the building blocks—and in that department mechanical equipment may be very useful."

He set up his ground radar device, and began to send signals straight down. He aimed the signals in various directions and, once, obtained a reaction which indicated the

existence of a tiny cave—it was a mere pocket, and unimportant.

He repacked the radar instrument, and began to tune the vibration machine. The response needle leaped suddenly. There was a shout from Rogan: "Hanley—jump—this way!"

Hanley heard a crashing sound above him, and involuntarily looked up. He yelled hoarsely as he saw the rock, only feet away. He tried to duck—and there was a stunning blow, an instant of unbearable pain, and blackness.

Pain. His head ached and ached. With a groan, Hanley opened his eyes. He was lying beneath the overhanging edge of the rocky cliff, a few feet from where he had been when the rock struck him.

The sound of the nearby waterfall was loud in his ears. Instinctively, before he remembered that it was still out of sight, he strained to locate it. He succeeded only in getting a better view of the visible part of the ledge, where Rogan had been before the rock struck him.

Rogan was not in sight.

Hanley climbed to his feet. His equipment was lying to his left, the radar device on its side, smashed. Ignoring it, he walked along the ledge past it to where there was a sharp turn. That gave him a view of nearly a mile of the river's curving bank. There was not a movement anywhere that he could see.

Puzzled, and beginning to be angry, Hanley walked in the other direction nearly two hundred yards. He saw the falls suddenly around a bend. The water dropped more than a hundred feet to the beginning of a great valley. A forest came down to the river's edge, and stretched away into the distance, a green and brown vista.

Nowhere was there a sign of Rogan.

Hanley returned to get his things, undecided as to what his next move should be. He felt impelled to go on. And yet,

unquestionably, the rock had missed killing him by millimeters. There was caked blood on the side of his head, and his cheek burned where the skin had been scraped off.

He was momentarily relieved to discover a note stuck in the handle of the Geiger-counter. "The guy's human after all," he thought.

Then he read the note. It said: "Go back to the ship! I'll be gone for a day or two."

Hanley compressed his lips, and the flush that mounted to his cheeks was not all fever from his wound. Yet, once more, his anger died away. Rogan was not responsible for him; and his job on this planet did not require that he look after injured people.

Hanley switched on the walkie-talkie. The earphones were alive with sounds. His own voice, in jumbled messages that he'd sent from the ship more than a week before, was part of the crescendo of noise. Half a dozen times, he tried to send an S.O.S., giving his position. The appeal was taken up, and lost among the rest.

There was nothing to do but start along the trail back . . . He reached the village just before dark, and was immediately taken up to the ship. Both doctors insisted that he spend the night in the hospital ward, though they reported reassuringly that he would probably be all right in the morning.

Hanley slept fitfully. Once, he waked up and thought: "At least he's a courageous man. He's down there alone, at night."

It justified to some extent his own lie to the others. He had told them that Rogan had gone on only after assuring himself that Hanley was not seriously hurt. Rogan had done nothing of the kind. But it was essential that the colonists continue to trust him.

Some time during the night Hanley's strength and energy came back. About dawn, he opened his eyes in tense excitement. That rock! Its fall had been no accident. Somebody or something had shoved it down upon him.

"I'll go out there in the morning," he decided.

He was dressing when his wife came in, about nine o'clock. She walked over to a chair, and sank into it. Her fine gray eyes looked tired. Her long blonde hair had not been properly arranged. There were lines in her face.

"I've been worried," she said drably.

"I'm all right." Hanley spoke reassuringly. "I was only bruised a little, and shaken."

She seemed not to hear. "When I think of him down there with the fate of the whole colony depending on his remaining alive—"

Briefly, it shocked Hanley to realize that her anxiety was for Rogan, not himself. She looked up unhappily.

"Len, do you think it was wise of you to let him go on alone?"

Hanley stared at her in amazement, but made no reply. It seemed to him that there was no adequate comment to make to that. Nevertheless, as he ate breakfast, he felt more determined than ever to solve this problem before Rogan.

A few minutes later, with Frank Stratton at the controls of the crewboat, he set out once more for the river. His plan of action was simplicity itself: If there was life here, it would show itself in some way. An observant man should be able to find it without having a special type of brain.

They came down in a meadow half a mile from the river and about a mile from the waterfall. It seemed a sufficiently central position from which to examine the rock-throwing episode.

Young Stratton, who had been silent during the flight said suddenly, "Pretty country—if it weren't for the stones."

Hanley nodded absently. He climbed down to the ground, and then paused for another survey of the countryside. Trees, miles of green grass, gaily colored flowers, the silvery gleam

of the waterfall, and the great forested valley beyond it—here was natural beauty in abundance.

True, as Stratton had pointed out, there was small rocks in plenty, but they could be removed. Hanley walked to the nearest one, and picked it up. It was about the size of a large melon, and unexpectedly light in weight. He stood holding it, watching the sunlight flash over its surface.

At first glance, it seemed to be granite, the bright reflecting surfaces suggesting mica specks. On closer examination, Hanley wasn't so sure. He saw that his fingers were already stained yellow. Sulphur, he guessed. And in rather free form.

Behind him, Stratton said sullenly, "This fellow, Rogan—who is he? I mean, is there some special reason why the women have to go silly over him? Dorothy kept me awake half the night worrying about his being down here alone."

Intent though he had been on the stone, Hanley recalled the similar reaction of Eleanora, and half turned. "He's the only one of his kind," he began, "except for—" He stopped. For the rest was rumor only. He went on slowly, "According to reports, his parents were wrecked on some uninhabited planet, and he was born there while they were repairing the ship. He was still a child when they took him away, and by the time they began to suspect he was different, it was too late."

"Too late for what?"

"They had no idea where the planet was on which they'd been wrecked."

"Oh!" The blonde youth was silent. Hanley was about to return his attention to the stone when Stratton said, "What's this story about his having children all over the galaxy?"

"Another rumor."

Hanley spoke curtly. It gave him no pleasure to defend Mark Rogan, especially when his own mind was uneasy with the same suspicions as Stratton was experiencing.

"What's he trying to do?" asked the young man grimly. "Produce a bunch of freaks like himself?"

That was so exactly the way he had originally heard it that Hanley swallowed. In spite of himself, he said sarcastically, "Maybe he believes his wild talent for dealing with non-human races should be spread as widely as possible. Particularly, I imagine, he feels that when his services have been called for, the women of the new colony should be only too willing to provide perceptive children and so secure the future of the human race on that planet. It—"

He came to an abrupt stop, startled. He had intended to be ironic, but abruptly the notion sounded plausible. *And necessary.*

"My God!" he thought, "if he ever comes near Eleanora, I'll—"

In abrupt tension, he raised the rock in his hands above his head, and flung it down upon another one nearby. There was loud, cracking sound. Both stones shattered, and a chance wind blew a cloud of yellowish dust into his face. The smell of sulphur was momentarily unbearably strong. Hanley coughed, almost choked, and then he had backed out into fresher air.

He was about to bend down over the broken pieces of the two stones, when Stratton let out a yell. "Mr. Hanley—the rocks—they're moving!"

In that first moment of mental confusion, Hanley had several fantastic impressions. Unquestionably, stones all over the meadow were beginning to roll toward them, slowly, as if they were not exactly sure of their direction—but they *were* rolling. Simultaneously, the wind that had been merely a series of gusts until then, began to blow at gale proportions. Dead leaves whirled into his face. Small pieces of grit stung his cheeks.

Hanley's eyes began to water. Through a blur, he made

his way to the crewboat, and fumbled for the steps that led to the deck. The wind was so strong now that he had to bend into it to remain on his feet. From above him, young Stratton yelled: "This way—quick!"

A hand caught Hanley's shoulder, guiding him. A moment later he was scrambling up the steps, and had flung himself prostrate beside his companion. He lay there for a minute, gasping. Then he saw Stratton wriggling toward the controls.

Hanley shouted at him, "Frank—wait!"

The blonde youth turned, and said earnestly: "Mr. Hanley, we'd better get out of here. We might be blown over on our side."

His words were tossed by the wind, distorted, and delivered finally half-faded, but still comprehensible. Hanley shook his head stubbornly.

"Can't you see?" he shouted. "These stones are the life-form! We've got to stay and find out things about them. If we can get enough information we won't need Rogan."

It stopped the young man. He turned a contorted face towards Hanley. "By heaven," he said, "We'll show that—"

His whole body twisted with eagerness. Hanley called to him, "Turn on the radio! Let's see what's coming over."

The radio was alive with voices. Wherever Stratton turned the dial, he produced uproar that was loud and continuous. Hanley listened grimly for a minute, and then glanced over the side of the boat.

He winced as he saw that the stones were piling up against the side of the small vessel, one on top of the other. The pile, at its highest point, was about three feet from the ground. It sloped back to a thin line of pebbles some twelve to fifteen feet from the bigger stones at the front. Hanley estimated that there were several hundred stones already in the pile.

More were coming. He flinched, but kept on looking. As far as he could see over that wind-swept meadow, stones

were rolling towards the crewboat. Their speed seemed to vary according to their size. He judged that the medium-sized ones were traveling two or three miles per hour, whereas several that were almost two feet in diameter were moving at nearer five miles per hour.

The pile grew even as he watched. Hanley turned uneasily toward Stratton. And saw that the young man was pushing with a stick at something that seemed to be threatening him from the other side of the small craft.

Stratton turned, "The stones!" he yelled hoarsely. "They've piled up. They'll be spilling on top of us in a minute."

Hanley hesitated. It seemed to him that by remaining they had learned how the enemy attacked. Perhaps, if they stayed just a bit longer—

His thought was interrupted by another shout from young Stratton: "Mr. Hanley—look!"

Hanley followed the young man's pointing hand. A giant rock was lifting itself out of the ground a hundred feet away. It was at least ten feet in diameter, and it was poising now, turning, as if trying by means of some alien senses to decide its direction. In a moment it would be bearing down on them.

Hanley gulped, and then in a loud yet calm voice said, "All right—lift her up!"

As Stratton manipulated the drive control lever, there was a surge of power that sent a vibratory impulse through the rigid metals of the ship. The deck throbbed under Hanley, and he could almost feel the engines straining to lift the craft.

"Mr. Hanley, something is holding us down!"

Hanley thought blankly: "We'll have to get out and run. But where to?"

He was about to say, "Try again!" when he saw that the

huge rock was starting to move. Straight at the ship it came, gathering speed each time it turned over.

Hanley shouted, "Frank—the big rock—come this way!"

He didn't wait to see if the young man obeyed. With a convulsive effort, he flung himself far out over the side of the craft. He landed on the rock he had aimed at, and, using it as a spring board, leaped again.

Behind him, there was a crash, a squealing of metal and the shriek of a human being in mortal agony.

And silence.

He was running, with a dying wind lending wings to his feet. Hanley finally slowed from exhaustion, and looked back. He had gone about two hundred and fifty yards; and there were several trees and much shrubbery between him and the crewboat. But he could see that the rock was still lying on top of the smashed craft. He noticed no movement anywhere. Even the stones were still.

The great wind blew in gusts only now. It was spent. Already, the incident had a dream-like quality. It seemed incredible that Frank Stratton was lying dead or desperately injured in the wreck of the boat. Hanley thought distractedly: "I've got to go back."

A hundred feet from him, a small stone stirred, lifted itself out of its hole, and started hesitantly toward him. Simultaneously, there was other movement. Scores of stones began to move in his direction.

Hanley retreated. He had an empty feeling about what had happened to his companion. But far more important was the fact that he had found the hostile lifeform on this planet. He had to get back to the ship with that vital information.

He headed on a course parallel to the river toward the village, which he judged was three or four miles away. In a few minutes he had outdistanced the moving stones. "They're

slow," he thought exultantly. "It takes a little while for them to decide that somebody is around."

He began to picture the life of the colonists on this frontier planet. They'd have to clear rocks from whole areas. Ato-guns with their thousand-unit explosive charges to a loading would be standard equipment for men and women alike. It was even possible to visualize a time when the curious rock-life would be of museum interest only. They must have a very slow growth, and so could probably be eliminated from all except the most remote territories within a measurable time.

He was still considering the possibilities when he saw a solid glitter of stones ahead.

Hanley stopped, chilled. Hastily, he turned from the river. And stopped again. The stony glitter was in that direction, also.

Swallowing, he headed for the river. His eyes searched for stones in that direction. A few moving objects were visible among the shrubbery, but there was so much brush and scrub-wood that it seemed evident that small rocks would have difficulty in making progress. That became his hope, instantly.

He hurried past several large trees, sizing them up for girth as he went by. The largest tree in the vicinity he found less than two hundred feet from the cliff's edge.

One section of its huge trunk sloped up from the ground at so gradual a slant that he'd be able to run up it swiftly, scramble up to another thick branch, and from there go almost to the top of the main trunk which towered majestically above any other tree in the neighborhood.

Hanley hurried to the edge of the cliff overlooking the river. The water was nearly fifty feet below, and the wall of the cliff ran sheerly down. It even slanted inward slightly; and there was no possibility of climbing down with a ladder.

One look convinced Hanley that the river did not offer a way of escape.

As he headed back toward the tree, he saw uneasily that more than a score of stones had rolled between him and the safety of the trunk. He walked straight toward one of them. It kept rolling in the same direction after he had stepped over it, and did not stop until he had gone past two more of the blind things. Then it halted, and began hesitantly to move towards him again.

His fear faded even more. He took a quick look around to make sure that he was not being hemmed in. Then he waited for the stone to come up to him. As it approached, he studied it anxiously for a sign of intelligence. There was nothing but the smoothly porous, rock-like substance.

It rolled right up against his foot, touched his boot—and attached itself.

He kicked at it, but it clung as if it were glued to the boot. It weighted at least five pounds, and when he moved his foot he felt the drag of it, the need to strain his muscles in order to lift it, the sharp fear that he wouldn't be able to get rid of it.

Other stones were approaching him. Alarmed, Hanley retreated to the tree trunk, and, bending down, removed the boot to which the rock had attached itself. He shook the boot, vainly. With abrupt determination, he raised it above his head, and flung it, boot and stone together, straight down on another stone.

The two rocks dissolved; there was a gust of wind that blew the sulphurous dust into his face. Hanley coughed furiously. When he could see again through his tear-filled eyes, he was first attracted to a gleaming crystal that lay in the pile of debris. He studied it, then hastily he recovered his boot, and started up the trunk.

It was time. As far as the eye could see, the land glittered with the movement of stones converging towards him.

His day in the tree passed uneventfully.

Just before dark, Hnley climbed to a higher branch and found himself a reasonably comfortable crotch for the night. He spent the early hours of darkness wide awake, alert to sounds below. About midnight, he dozed.

He awakened with a start. The sun was just coming up over the horizon—and a crewboat was speeding toward him, following the course of the river. He jumped hastily to his feet, almost fell out of the tree as a thick branch broke like so much dead wood. And then, safely balanced again, he tore off his coat and shirt.

He began to wave the shirt frantically . . .

As Eleanora served him breakfast Hanley learned that Mark Rogan had returned to the ship the evening before, spent the night aboard, and departed at dawn. He stopped eating, and considered the news. Finally:

"Did he have anything to say? Had he solved the problem?"

He waited, jealous of his own discovery, anxious not to have been out-done. Eleanora sighed; then:

"I don't think so. Of course, he talked mostly to the men. Perhaps he gave them private information."

Hanley doubted it. And so, by the simple process of going out and looking, an ordinary man had bested the famous communications expert.

He was about to resume eating when the odd tone in which his wife had spoken made him look up. "He talked *mostly* to the men?" he echoed.

There was a flush on her face. She said, "I had him to dinner." She added quickly, "I expected you back. It didn't occur to me that you—"

She sounded so defensive that he felt compelled to interrupt "It's all right, my dear. I understand. I understand."

He wasn't sure that he did. As he continued to eat, he

studied her unobtrusively, shaken by his thoughts. Once he almost said: "Are you sure that he didn't also spend the night?" The insult of the thought was so outrageous that he cringed, and felt angry at himself.

But it decided him. He had been intending to wait, and learn what Rogan had discovered; the problem of dealing with the rock-life was by no means solved. But he found himself suddenly less amenable to that kind of reasoning.

He discovered that the other leaders, once they heard the detailed account of his experience, were equally reluctant to wait.

"Our women have gone crazy about that man," one individual said angrily. "Do you know what my wife suggested when she heard that Frank Stratton was dead? She thought his widow ought to marry Rogan right away, before he went away. Of course, from all accounts, he's not the marrying kind. But just imagine having such an idea instantly."

"It's a survival instinct," said another man. "History is full of stories of women who have wanted their children to be fathered by famous men. In this case, with Rogans' special ability—"

"Not so special," somebody interrupted. "Our own leader, Leonard Hanley, discovered the enemy without any help from the famous man."

Hanley ended the somewhat heated discussion finally by saying, "It will take us most of today to get our main equipment down. If Mr. Rogan condescends to turn up before we're ready to disembark the women and children, he can offer his views at that time. Otherwise—"

Mark Rogan, as it happened, did not condescend to turn up.

The landings were made in open areas along the river bank in the forested valley below the falls. By noon, everybody was on the ground. Hanley had a final consultation with

Captain Cranston, and was informed that the COLONIST 12 would leave immediately.

"We've already been far too long on this trip," the officer said in justification. "The owners will be furious."

Hanley could feel no sympathy for the gentlemen, but he recognized that he and the others would experience the grimmer effects of that commercialism. He tried to think of something that would delay the ship's departure, but all that occurred to him finally was:

"What about Mr. Rogan? Aren't you going to wait for him?"

Captain Cranston shrugged. "A patrol ship will probably pick him up. Well, good-bye."

As they shook hands, Hanley thought cynically that there was no suggestion now that Rogan could travel through space without spaceships. It seemed amazing that anyone could have believed such nonsense.

Midafternoon. Out of the corner of one eye, Hanley saw Eleanora—who had been working beside the tent—snatch a compact from a pocket of her slacks, and hastily start to powder her face. Hanley glanced in the direction she had been gazing, and winced. Mark Rogan was coming toward him along the river bank.

The Patrol man said nothing until he was less than half a dozen feet from Hanley. Then: "Where's the ship? Mr. Hanley, did you order this landing?"

His voice was as soft as it had always been, but there was an edge of suppressed anger in it that chilled Hanley despite his confidence. The thought came: "Have I possibly made a mistake?"

Aloud, he said, "Yes, I ordered the landing. It just happens, Mr. Rogan—" he was beginning to feel sure of himself again— "that I discovered the nature of the hostile life on this planet, and we have taken all necessary precautions."

Twice, Rogan seemed about to speak, but finally he

stepped back. There was an enigmatic smile on his face as he looked around at the busy colonists. Several trees had been chopped down, and they were now in the process of being converted to plastic.

Silently, Rogan walked over to the complex machinery, and watched the bubbling up of the sap in the wood as it was sawed, and then the swift chemical action that neutralized the resinous substnace.

He came back to Hanley, and his vividly green eyes seemed to glow with irony, as he said, "What *did* you discover?"

He listened with his head slightly tilted to one side, as if he were hearing more than the words. And his eyes had a faraway look in them; he seemed to be gazing at a scene that was in his mind. He said finally, "You think then that the crystal you saw in the rock after you had smashed it was possibly the 'brain'?"

Hanley hesitated; then defensively, "The piezoelectric crystal is the heart of radio and television engineering, and in a certain sense crystals grow, and—"

He got no further. Eleanora had run forward and grasped Rogan by the arm. "Please," she begged, "what's wrong? Whats the matter?"

Rogan released himself gently from her fingers. "Mrs. Hanley," he said quietly, "your husband has made a deadly dangerous error. The stone activity is merely a product of the scientific control which the ruling intelligence of this planet exercises over its environment."

He turned to the stricken Hanley. "Was there a strong wind at any time while you were being attacked?"

Hanley nodded mutely.

Rogan said, "Another manifestation."

He looked at his watch, and said, "It's a little more than two hours till dark. If we take only essentials, we can be out of this valley before the sun sets."

He paused. His green eyes fixed on Hanley's wavering gaze with a bleak intensity. He said curtly, "Give the command!"

"B-but—" Hanley stammered his reaction, then pulled himself together. "It's impossible. Besides, we've got to make our stand somewhere. We—"

He stopped hopelessly, already convinced, but too miserable to go on.

Rogan said, "Give the order, and I'll explain—"

Shortly after night fell, a gale wind sprang up. It blew for an hour, sand filled, stinging their faces as they walked behind the long rows of caterpillar tractors. All the younger children were taken up in the six crewboats. When the storm was past, several of the healthier children were brought down, and their places in the boats taken by women who could no longer remain awake.

About midnight, the attack of the stones began. Rocks twenty and thirty feet in diameter thundered out of the darkness into the range of the groping searchlight beams, which were mounted on the tractors. Before the extent of the assault could be gauged, two of the tractors were crushed. Metal screeched, men shrieked in dismayed agony—and mounted ato-guns pulverized the rocks before any more damage could be done.

Several people had to be rescued from small stones that attached themselves to shoes and boots, and prevented all except the most awkward movement. When that was over, Hanley had to walk among the weary men and women, and insist that Rogan's directive to "keep moving" be obeyed.

Just before dawn, the ground under them began to heave and shake. Great fissures opened, and individuals had terrifying experiences before they were pulled to safety out of suddenly created abysses.

As the faint light of day broke through the blackness of the

horizon, Hanley mumbled to Rogan, "You mean—they can cause sustained earthquakes of *that* proportion?"

Rogan said, "I don't think that will happen very often. I think it requires great courage for them to penetrate hot rock areas where such phenomena can be stirred up."

He broke off, thoughtfully: "I see this as an ally arrangement, with the onus being on man to prove that he can be helpful. Of course, it will take a while—after this unfortunate beginning—to persuade the Intelligence to consider such an arrangement. It doesn't think in human terms."

Hanley was intent. "Let me get this clear. You're taking us to a flat plain north of here. You want us to build concrete huts there while we wait for you to persuade the Intelligence that we mean no harm. Is that right?"

Rogan said, "It'd be better if you kept moving. But of course that would be very difficult . . . with women . . . children." He seemed to be arguing with himself.

Hnley persisted, "But we'll be reasonably safe on such a barren plain?"

"Safe!" Rogan stared at him. "Man, you don't seem to understand. Despite the similarity to Earth appearance, this planet has a different life process. You're going to learn what that means."

Hanley felt too humble to ask any more questions. An hour later, he watched as Rogan commandeered one of the crewboats, and flew off into the morning mists. About noon, Hanley dispatched the other crewboats to rescue some of the equipment they had abandoned the night before.

The boats came back about dark with a weird report. A barrel of salt meat had rolled away from them, and had evaded all their efforts to capture it. An atomic jet proved a hazard. It would start up, and lift itself into the air, and then shut off and fall back to the ground, only to repeat the process. It almost wrecked a crewboat before a magnetic

crane mounted on another boat lifted it permanently clear of the ground. Thereafter it remained lifeless.

Hanley guessed unhappily: "Tentative experiments."

The colony spent the night on a level grassy plain. Guards patroled the perimeter of the encampment. Tractor motors hummed and pulsed. Searchlights peered into the darkness, and all the grown-ups took turns at performing some necessary duty.

Hanley was awakened shortly after midnight by Eleanora. "Len—my shoes."

He examined them sleepily. The surface was all bumpy, with tiny knobs protruding through the polish. Hanley felt a grisly thrill as he realized that they were growing. He asked, "Where did you keep them?"

"Beside me."

"On the ground?"

"Yes."

"You should have kept them on," said Hanley, "the way I did mine."

"Leonard Hanley, I wouldn't wear shoes while I'm sleeping if it's the last—" She stopped, said in a subdued tone, "I'll put them on, see if they still fit."

Later, at breakfast, he saw her limping around, tears in her eyes, but without complaint.

That afternoon one of the tractors exploded without warning, killing its driver. A flying segment tore off the arm of a five year old boy nearby. The women cried. The doctors eased the youngster's pain with drugs, and kept him alive. There were angry mutterings among the men. One man came over to Hanley.

"We're not going to stand for this much longer," he said. "We've got a right to fight back."

Rogan turned up just before dark, and listened in silence

to the account of what had happened. He said finally, "There'll be more."

Hanley said grimly, "I can't understand why we don't set fire to every forest in this part of the planet, and clear the damned things from this whole area."

Rogan, who had been turning away, faced slowly about. His eyes were almost yellow in the fading light. He said, "Damn you, Hanley, you talk like so many scamps I've run into in my business. I tell you, you can't defeat this tree intelligence with fire, even though fire is the one thing it's afraid of. Its fear and its partial vulnerability is man's opportunity, not to destroy, but to help."

Hanley said helplessly, "But how does it operate? How does it control stones, and make winds and—"

"Those phenomena," said Rogan, "derive from the fact that its life-energy flows many times faster than ours. A nerve impulse in you and me moves approximately 300 feet a second. On this planet, it's just under 400,000. And so, even rocks have a primitive life-possibility. Crystals form easily, and can be stimulated to imitate any vibrations that affect them. Far more important, there is a constant flow of life-energy through the ground itself. The result is that everything can be affected and controlled to some extent. Divert the energy to the ground surface through grass roots and sand; and great winds rush in to cool off the 'hot' surfaces. Divert it through one of our tractors and—"

"But," said Hanley, who had been frowning," why didn't that tree I was on for a whole day and night—why didn't it try to kill me?"

"And call attention to itself!" said Rogan with that tight smile of his. "It might have tried something against you that would appear accidental—like the breaking of a branch that could make you fall—but nothing overt."

He broke off, firmly, "Mr. Hanley, there is no method but

cooperation. Here is what you'll probably have to be prepared to do."

He outlined the steps, coolly, succinctly. No encroachment for several years on an area where there were trees. Definitely no use of lumber for any purpose, except such dying wood as Rogan might, by arrangement with the forest, assign to be cut. Establishment of fire-fighting equipment to help all forests in the vicinity of the colony against spontaneous fires, the pattern later to be extended over the entire planet.

When Rogan had finished, Hanley considered the plan, and found one flaw in it. He protested, "What I'd like to know is, how are we going to maintain contact with this Intelligence after you're gone?"

As he finished speaking, he saw that Eleanora had come up beside him. In the fading light, it seemed to Hanley that she was bending forward, as if straining for Rogan's answer.

Rogan shrugged. "Time alone," he said, "can resolve that problem."

They built the village of New Earth beside a brook. There were no trees anywhere in sight. According to Rogan, the small shrubs that lined the banks of the stream were but distantly related to the greater tree-life, and could be used for any purpose.

There were no less than eighteen rock attacks during the next eleven days. In one of them, a stone one hundred and ninety feet in diameter roared across the plain toward them. It smashed two houses, plunged on for a mile across the plain, and then turned back. Crewboats with ato-guns successfully exploded it before it was able to return to the village.

And then one night nothing at all happened. At dawn, Mark Rogan turned up, pale and weary looking, but smiling. "It's all right," he said. "You get your chance."

Men cheered hoarsely. Women wept and tried to touch

his hand. Hanley stood back, and thought: "It's too soon to tell."

But the days passed, and there were no more manifestations. The guards began to sleep at their posts, and finally were no longer posted. At dusk on the eighth straight day of peace, there was a knock on the door of Hanley's house. Eleanora answered, and Hanley heard her talking to someone in a low tone. The softness of the other voice made him abruptly suspicious, and he was about to get up from his chair, when the door shut, and Eleanora came back in. She was breathless.

"He's leaving!" she said.

Hanley didn't ask who. He hurried outside, and saw that Rogan was already at the outskirts of the village, a vague figure in the gathering darkness. A week later, there was still no sign of him. Among the rank and file of the colonists, the whisper was that he had gone in his fashion to some other part of the galaxy. Hanley ridiculed the story, but when he heard it soberly stated in a gathering of technicians, he realized gloomily that the legend of Mark Rogan would survive all his denials.

Two months passed. Hanley awoke one morning to find that Eleanora had slipped into the bed beside him. "I wish to report to my lord and master," she said airily, "that there's going to be an addition to the Hanley clan."

After he had kissed her, Hanley lay silent, thinking: "If it has green eyes and jet black hair, I'll—I'll—"

He couldn't imagine what he'd do. He groaned inwardly in his terrible jealousy. But already at the back of his mind was the realization that the race of man would survive on one more alien planet.

THE EARTH KILLERS

THE ROCKJET climbed steeply up on a column of crooked fire. In the machine, Morlake could feel the turbulent impulses of the gyroscopic stabilizers. But the flow of upward movement was as slick as oil, and the acceleration brought nothing more than a feeling like that of a hand squeezing his stomach.

At sixty miles above Kane Field he leveled off and put the new plane through its paces. After five minutes he turned on the radio and spoke softly.

"Morlake calling Gregory."

"Yeah?" Laconically.

"She likes the climate."

"How's the ultraviolet?"

"Blocked."

"Cosmics?"

"Registering."

"Good." The engineering officer sounded satisfied. "Until somebody figures out a way of blocking cosmic rays completely, we'll be satisfied with minimums. Speed?"

"About one banana." That was code for seven hundred MPH.

"Feel anything?"

"She's singing a lullaby."

"Sweet, huh, at one banana. What do you think, generally?"

"Sadie's going to be with us for quite a while."

"As smug as that, eh?" The engineer turned away from the mike. His voice, though still audible, grew tiny. "Well, general, there you are. She ticks."

"Ought to," was the faint reply. "We were beginning to sweat. She cost four hundred million to develop."

The engineer's voice had a grin in it. "Where do we go from here? Mars? Or the moon?"

"Sadie is our top, boy. And we're lucky to have her. The new Congress is tired of our costly little experiment, and wants to reduce taxes. The new President thinks the development of weapons leads to war. He doesn't like war, and so in this year of 1964—"

He must have thought better of what he intended to say. There was silence, though not for long. Gregory's faraway voice said, "What's next?"

"Dive," said the general.

The engineer's voice approached the mike:

"Morlake."

"I heard."

"Okay. See if you can hit O'Ryan."

Morlake grinned. The three test pilots of Kane Field played a game against the famous isolationist publisher. Each time they dived they chose as target the Star-Telegram building, which peered seventy stories into the sky beside the flat, dead-looking waters of Lake Michigan. The idea was, if anything went wrong, they might as well take O'Ryan and his penthouse into hell with them. And they meant it too, after a fashion.

The plane began to shudder. At eighty miles the jets were silent and useless, and the hammering of the rockets was a sharp sound carried by the metallic frame. The rockets were not meant to carry the load alone. All the smoothness was

gone from his marvellous machine. Morlake paused for a final look at the universe.

It was tremendously, unnaturally dark outside. The stars were pinpoints of intense brightness, that did not twinkle or glitter. The sun, far to his left, was only approximately round. Streamers of flame and fire mist made it appear lopsided and unnatural. A quarter moon rode the blackness directly overhead.

The rockjet, moving very slowly, not more than a hundred miles an hour, was over Chicago now. The city was lost in haze, quite invisible to the naked eye. But on the radar screen every building was etched, and there was no mistaking the Star-Telegram structure. Morlake waited until the hair-line sights directly under his seat were touching the shadow of the building, and then he carefully tilted the nose of the plane downward.

He was in no hurry, but presently the front aiming device was pointed directly at the image on the radar screen. The speedometer was edged over to a thousand miles an hour, when there was a dazzlingly bright flash in the sky behind and above him. Something big and hot as hell itself flashed past him, and began to recede into the distance below.

Morlake cringed involuntarily. He had time to think: A meteorite! Speed about fourteen hundred miles an hour. Below him, the bright flame fuzzed and winked out. He stared at it astounded, removed his foot from the accelerator; and then, there, twenty feet away, was the object. And it was not a meteorite at all.

Morlake gazed at the thing in blank horror, as the radio embedded in the cushions beside his ears clicked on, and Gregory's voice shouted:

"Morlake, we've just got word: New York, Washington, scores of cities destroyed in the last ten minutes by giant

atomic bombs. Morlake—get away from Chicago with Sadie. She's our only working rockjet. Morlake, you hear me?"

He heard, but he couldn't speak. He sat frozen to the controls, glaring at the atomic bomb twenty feet away.

After a blank period, Morlake stirred like a sick dog. His reflexes began to function in a dream-like fashion. His eyes shifted heavily over the instrument board. Slowly, he grew aware that the world around was becoming brighter. A faint dawn glimmered in the distance to either side, and the blaze of light below was like a vast fire bowl into which the bomb and the ship were falling.

He thought: The flame that had seared his ship when the bomb first passed him—that must have been its forward rocket tubes slowing the thing, so that it wouldn't burn up from sheer speed in the thick atmosphere lower down.

The thought passed as though it had never been, as if the thin, shrieking wind building up outside had torn it from his brain. In its place, a formless mind stuff, seeking shape, pressed and quivered inside him. Plans too fleeting to be comprehended multiplied and coalesced. Impersonal plans involving death for his body. Impersonal, because the city below was not his city. No one in it knew him or cared about him, not even a secondary girl friend. He hated the place. Windy, dirty, wretched, miserable, hot in summer, cold in winter . . . No, there was nothing there, nothing at all. But the yeast of plans fermented with violence and direction.

"Morlake, damn your soul, answer me!"

Answer me, answer me, answer me! Over all the mad schemes that were now springing full-grown into his head, one took precedence. If he could deflect the bomb into the lake, five million people would have a chance for life.

He knew better. Even as he shoved his plane over on fingers of wan jetfire, and felt the metal frame jar against the

bomb, he knew that the greater bombs needed only to fall into the vicinity of cities. Direct hits were unnecessary.

But he pushed with the plane's vertical jets. His body shrank, expecting the blow of radiation. And at first nothing happened. There was not enough air to give power even to those superjets.

"Morlake, for God's sake, where are you?"

He was too intent for words to reach him. He had a fear that he would push the plane too hard, and that the curved fuselage would roll itself away from the streamlined bomb. Delicate manipulation, touch, pressure, of, so delicate.

The movement began slowly. He noticed it first on the hairline sighting device in front of him. O'Ryan was no longer directly below. At that instant of infinitesimal success, the bottom of the bomb flashed white fire. One burst only, but it jarred his precious contact. He felt his machine slip clear of the bomb, and with a shock he saw that his sights were once more pointing straight at the newspaper skyscraper.

The bomb has reacted to his pressure. It must be on a beam, and couldn't be diverted. Almost instantly, the bomb offered one more surprise. As he sat in a haze of uncertainty as to his next move, it sent a flare of light billowing over the rockjet. Morlake shrank, and then the light was gone. He had no time to think about it, because—

"Morlake, you blankety blank, save Sadie!"

Anger, despair, hate, frustration and the beginning of insanity—all were in that shout. Morlake would have ignored it too, would have been almost unaware, but at that split instant his gaze touched the altimeter. Twenty miles. Only twenty miles to earth.

The fever of his purpose burned out of him. Suddenly, he thought of Sadie as those desperate men at Kane Field were thinking of her. Sadie, the sleek, the gorgeous, Sadie of the high tail, the first of a fleet not yet built.

He spurted his forward jets. And saw the bomb sink below

him. Instantly, it was gone into the mist. He began to turn, to try to pull her out of her dive. Three times he blanked out, and came to again, dizzy but alive. Finally, the plane was level. Morlake brought her nose up, and climbed on a long slant at an acceleration that clenched his body.

Behind him, below him, there was a glare as of a thousand times ten thousand suns. A supernal blaze it was, unmatched in the sidereal universe except by the unthinkable fires of a Nova-O sun at its moment of ultimate explosion.

Catastrophe for a continent! Forty million people in fifty major cities died in a space of not more than thirty minutes. It was later estimated that each of the bombs dropped generated flash heats of forty thousand million billion degrees centigrade. Everywhere, the forces released were too great to be confined. The balance of a hemisphere was shaken. Earthquakes convulsed regions that had never known a tremor. And all that afternoon and night the ground settled and quivered with a violence that had not been paralleled in the history of mankind.

By mid-afternoon of the first day, a stricken people had begun to rally and reintegrate. Senator Milton Tormey, recovering from food poisoning in Florida, brought together two aged, ailing Congressmen in a resort hotel, and the three issued a manifesto ordering a six-month period of martial law. In Berlin, General Wayne, commanding American occupation forces in Germany, demanded that all countries in Europe and Asia open their borders to American planes. Delay or refusal would be construed as a confession of guilt, and would bring instant retaliation from secret American atomic bomb bases.

The national guard was called out. Radar and sonar stations were put on battle alert, and throughout the night hastily-armed men and women stared sleeplessly up into the

skies, waiting for the paratroop armies that would surely arrive with the dawn to conquer a devastated nation.

Morning broke over the thousand horizons of America, and the sky and land were still untouched by alien sounds and alien purposes. The sun came up out of the east. People were able to look at their red-eyed neighbors, and to realize that the complete end of their world was not yet at hand. After a week the enemy had still shown no sign. It took a month for American plane patrols, fleets of planes and divisions of men to discover that no nation on earth was organizing for war. Everywhere, peaceful scenes met the frenzied searchers. They retreated finally, reluctantly, from lands they had so summarily entered.

Day by day it grew clearer that the enemy had struck a mortal blow at Earth's most powerful nation. And he had done it so skillfully that he was going to get away with it.

Twice, Morlake, returning to base after his wild flight, made the sweep over Kane Field. The first time, he was past before he recognized the super-airfield. The second time he savored the desolation.

The surface buildings, the control towers, the markers, the lights were down. Planes in twisted heaps on the field and beyond. The wreckage spread into the distance southward as far as he could see! Planes and parts in every degree of destruction, sections of metal buildings, chunks of cement, of brick, of plastic and glass, and miles of splintered lumber. A giant had trod this land.

Morlake settled his machine on its vertical jets, like a helicopter, near one of the underground entrances. As he came down, he saw a score of human figures sprawled almost at the mouth of the entrance. When he rolled nearer, they ceased to look so human. He glanced away quickly, and carefully guided his machine between them and the shelter.

A fierce wind was blowing as he climbed to the ground,

but except for that, silence lay over the military air hub of the continent. He stepped gingerly over the wreckage of the underground entrance, and made his way down cracked steps. Plexiglass lights glowed in the upper corridors, untouched by the secondary violence that had raged through the corridors themselves.

Everywhere the walls were smashed. Ceilings had crashed down, and he could hear the remote thunder of loosened girders and earth and cement, tumbling to form barriers in the depths of the supposedly impregnable chambers. Morlake fumbled past two such partial obstacles, came to a third that blocked his passage completely. Then, as the ceiling a few yards behind him rumbled ominously, he began his retreat to the surface.

He reached the open air, breathing hard, and forced himself out of pity to examine the less damaged bodies. All were dead. He floated around the field, landing a dozen times to search shells of buildings, and to peer into underground entrances. He found two men whose pulses flickered with faint life.

The failed to react to the stimulants in his first aid kit, so he loaded them into the jet. Up in the air again, he turned on his radio, and at first the ether seemed silent. It was only when he turned the volume almost to full that a faraway voice scratched through to him. It kept fading out, but each time it came back in, so that he did not lose the continuity:

". . . People in cities over fifty thousand are ordered to leave, but all merchants in those cities must remain in their stores. Repeat: merchants must remain. Those who leave without authorization will be shot . . . Sell your goods to anyone who comes in, rationing all customers . . . One suit, one blanket. . . . Groceries, about two weeks supply. . . .

"People in cities or towns of less than fifty thousand, stay at home. Understand—stay at home! . . . Repeat emergency warning to people on Lake Michigan. A tidal wave

is sweeping up from Chicago at a speed of approximately four hundred miles an hour. All shore towns will be destroyed. Wait for nothing. Leave at once!

". . . Flash! London. Great Britain announces declaration of war against unknown enemy. Other countries following . . ."

Morlake's mind couldn't hold to the words. The selectivity was too poor, the voice a mere segment of remote sound. And besides, the first stunned calm was slipping from him. He sat in his plane, thinking of millions of men and women whose bodies had been reduced not to ashes but to atoms . . . He was profoundly relieved when he reached his first destination, a small military airport near a sizeable city in Iowa. The two men were rushed off to the local hospital. While his machine was being refueled, Morlake had a brief conference with three worried executive officers. They agreed that his best course was to fly to one of the secret bases. It was to them that he mentioned for the first time that he had seen the Chicago bomb.

All three men grew excited, and he had a hard time getting away. They were certain that experts would be able to make much of his experience.

It was some time before he was allowed to approach the secret field. His radio roared with alarms and warnings that he "must leave at once." He insisted that the commanding officer be informed of his presence, and finally he was permitted to set his machine down into a cavernous elevator, and was drawn underground.

He was ushered into the office of General Herrold, and at that time he made only a brief report. He told the general the circumstances under which he had seen the Chicago bomb, and paused, waiting for the flood of questions he expected.

For a long time the old man looked at him, but he asked for no details. And Morlake was being ushered into his quarters on the next tier down before the meaning of the

man's thin-lipped hostility penetrated. "By God," he thought, "he didn't believe me!"

It was staggering, but it couldn't be helped. No matter how incredible it sounded, it was his duty to tell what had happened.

He wrote his report as best he could, then phoned the general's office that it was ready. After some delay he was told to remain in his quarters, that an officer would come for the report. That was chilling, but Morlake pretended to see nothing wrong. When the officer had come and gone with the document, Morlake lay down, conscious of unutterable weariness. But his brain was too active for sleep.

Reaction to all the straining tensions of the day took the form of blank horror, of a frank disbelief in what his eyes had seen. Slowly, his emotions became more personal. He began to picture the possibilities of his own situation here, where a suspicious martinet was in command. "Damn him," he thought in a fury. "All the radar stations designed to spot bombs coming down near cities must have been destroyed. And that leaves only what I saw."

But what did this experience prove? It was the one major clue, so far, to the identity of the enemy. And it seemed valueless.

Weeks had still to pass before he would realize how tremendous a clue it really was.

II

ORDER in the court."

The hastily convened court-martial was about to begin.

"It is the intention of the prosecution," said the judge advocate after the preliminaries were over, "to bring evidence that will establish one or the other of two charges against Captain Morlake. The first charge is that he did not, as he has claimed, see an atomic bomb, and that in fact, his purpose was to procure cheap notoriety for himself out of a nation's most profound agony. It is the opinion of the prosecution that, if the court finds him guilty of this charge, the penalties should be severe in proportion to the monstrousness of the disaster that has befallen our country.

"The second charge," the judge advocate continued, "is more serious. It assumes that Captain Morlake did, in fact, see the bomb, as he has stated, but that he has deliberately falsified his report, or else was grossly negligent in failing to observe the direction from which the bomb was coming."

For Morlake, the deadly part was that he knew no one. He was not permitted to subpoena character witnesses from fields to which men he had known had been scattered. By the time the two rocket experts had testified, he recognized that he was doomed. Shortly after his arrest, when one of his guards had whispered that fully half the officers of the secret field had lost members of their families in the bombing, he realized what weight of emotion was against him. These men, twisted by disaster, could not feel, see, or think straight.

The crisis came swiftly after he himself was called to the stand.

"There is no doubt in your mind," the judge advocate said, "that what you saw was an atomic bomb?"

"It was an atomic bomb."

"And it was coming straight down?"

"Yes, it was. Absolutely straight."

"This was about how high above the gound?"

"At least seventy-five miles."

Pause; then, gravely:

"Captain Morlake, you have heard experts testify that any bomb accurately aimed from any point on the earth's surface would have been describing a parabolic curve of some kind at the height?"

"I have heard the witnesses."

"And what do you conclude from their testimony?"

Morlake was firm. "A short time ago I was convinced that our rocket science was superior to that of any other country. Now, I know that we've been surpassed."

"That is your sole comment on the death of forty million Americans. We have been surpassed."

Morlake swallowed hard, but he controlled himself. "I did not say that. The bomb was coming straight down."

"Hadn't you better think that over, Captain?"

Insinuating words. He knew what they wanted. In the short time since the trial had been scheduled, the prosecution had had several bright ideas. The previous night they had come to him with drawings of hypothetical trajectories of bombs. Every drawing was on a map of the world, and there were three different points of origin illustrated. If he would agree that the bomb had been slanting slightly in any one of the three directions, he would be a hero.

"You still have an opportunity, Captain," said the judge advocate silkily, "of being of great service to your country."

Morlake hesitated miserably. "I'm sorry," he said at last, stiff with fear, "but I cannot change my testimony. It was coming straight down."

The sentence was thirty years, and he was lucky. Within a month of his trial men were being hanged from lamp posts, and sedition trials sprouted like weeds over a land that could not discover its attacker.

On the ninety-fourth morning, Morlake put on his fatigue suit as usual. He had only the vaguest sense of ever having done anything else, the routine was so much a part of him. On the way to breakfast he glanced at the bulletin board, where the day's work sheet had already been posted. Ploughing the east field. Planting potatoes in the valley. Repairing the east fence. Cleaning the stables. Transferring feed to a new barn.

It was the usual pattern, with only one thing missing. His own name was not attached to any one of the details. Immediately after breakfast he reported the omission to the day sergeant.

"Okay, you go along with the potato planting detail."

Morlake went, telling himself that, if his name were ever again missing from the board, he would report to the office of the clerks who made up the work sheet.

It wasn't that the work hadn't been good for him. He had always been as hard as nails, and his internal muscles were so perfectly balanced and organized that, in all the army air forces, he had proved by actual test that he could withstand more acceleration than any other man.

And he felt better now, healthier, more awake, more alive, more appreciative of life. But he didn't like planting potatoes. The army farm used the old, primitive method of bending down to place each seed-spud by hand . . . By noon, he was sweating and tired.

The mid-day dinner was eaten in the field. Men squatted on the grass with their plates and cups. And the chatter took exactly the same form as on the day before, and the day before that, and so on back into infinity.

"The bombs . . ." "Hey, did you hear what that new guy said the other day, about somebody staggering out of an undamaged basement in New York City?" "Some character in the Middle West is saying that bombs could only have come from the Moon . . ." " . . . It's the Germans, or I'll be dipped in . . ." "I'll put my money on Russia . . ." "Hell, if I was General Wayne in Berlin, I'd—"

The detail sergeant climbed lazily to his feet. "Okay, generals, up and at those potatoes, before the bugs move in."

The afternoon lengthened. About four o'clock a car detached itself from the haze that hid the farm buildings five miles to the north. It came lazily along a dirt road, disappearing behind trees and into gullies, but always it came into view again, each time nearer, and obviously as puzzling to the detail sergeant as to the prisoners. The sergeant and his corporal walked slowly towards the road as the car approached, and stood waiting for it.

Up, down, up, down—The remaining guards kept things moving. The ploughs whuffed and thudded through the soil folding the fresh dirt over the seed potatoes. The horses champed and swished their tails. One of them noisily passed water. Up down, up, down—Morlake, sweating and breathing hard, alternated the rhythmic movement with glances at the nearing car and with his own thoughts.

Of the various articles and newpaper editorials that he had read in the farm library, only one, it seemed to Morlake, contained a sensible idea: The purpose of the bombing had not been to destroy the nation or conquer it, but simply to change its political character. With the vociferous, noisy, highly-educated, politically conscious people of America's world-cities out of the way, power would revert to the isolationist agricultural communities. Every capitalistic state in the world would benefit from the markets from which American industry would have to withdraw. And the dozen Com-

munist states had their own reasons for appreciating the end of American influence in Europe, Africa and Asia.

If the enemy were not discovered for several years, it was likely that the elected representatives of cautious farm states would not dare to retaliate.

Only three facts were known about the aggressor: He existed. He had left no clues in his own countries. And he had dropped his bombs straight down onto at least one city.

Unfortunately, the one man who believed the third item was Robert Morlake, and so far his sole thought was that the bombs must have been launched from the Moon . . . Morlake smiled wryly. He could imagine himself trying to convince other men that they must go to the Moon to find out the name of their enemy.

"Morlake!"

Morlake straightened slowly and turned. It was the corporal who had gone with the sergeant to the car. In the near distance, the machine was turning noisily around. Morlake saluted.

"Yessir?"

"You're wanted at the office. You weren't supposed to come out on a detail this morning. Come along."

Five minutes later, Morlake knew that he was being presented with an opportunity to escape.

What had happened Morlake discovered gradually. On the East Coast, General Mahan Clark, ranking staff officer surviving, declared martial law on the afternoon of the bombing. For three months he worked eighteen to twenty hours a day, to integrate the shattered armed forces and to organize the country. Railway, telephone and telegraph lines were repaired, and postal services resumed. Priorities and rationings were instituted, and an industrial census taken.

At the end of seventy days he had a picture of the country's resources. By the eightieth day, industries that needed each

other's products were being coordinated on a vast scale. Troops patrolled cities and towns; a national curfew was put into effect; severe penalties were invoked against mobs and mob leaders. Mass hangings of known Communists ceased. People with foreign accents were still being molested, but the cases grew more isolated daily.

From the eighty-fifth to the eighty-eighth day, the general took a holiday, during which time he played dice, ate, rested and slept, and listened only to emergency reports. Back at his headquarters, he moved into a new office.

"From now on," he told reporters, "I'll delegate all except a minimum of administrative work. I will devote my attention to picking up technical matters at the highest level. I'm an engineer, not a politician. What I want to know is, what the hell happened to our advanced stuff on the day of the bombing? Where is it, and who's alive that knows something about it?"

Late in the afternoon of the ninety-first day, he looked up bleary-eyed from a mass of papers, and called in an adjutant.

"There's a report here that S29A was scheduled for a test flight on B-day. Was the test made? If so, what happened?"

Nobody knew until the following morning, when a lieutenant produced a report form Field R3 in Texas that the rockjet S29A had landed there a few hours after the destruction of its base, Wayne Field, ninety-two days before.

"Who the blank," said Clark, "is the misbegotten incompetent in charge of R3? Herrold? Oh!"

He subsided. He had once been under Herrold's command, and one observed certain amenities with former superiors. Later, though, he remarked to a ranking officer: "Herrold is an old fool. If a man under him has twice as much sense as another, he can't tell the difference. Drive, ability, leadership—he can't see them." He scowled. "Well, the best bet, I suppose, is to have the machine brought here. Inform Herrold, will you?"

The order for the plane caused a turmoil in the upper officialdom of Field R3. No one there could fly the rockjet.

"It's a special plane," an air-force major explained to General Herrold. "I remember that the man who was to test it had to go to the factory and learn all kinds of preliminary things before he was even allowed to warm her jets. The difficulties, I understand, derive from an intricate combination of rocket and jet drives."

"Oh!" said General Herrold. He thought about it for some minutes, then, "It wouldn't take you long," he suggested, "to learn to fly it, would it?"

The big young man shrugged. "I've been flying jets for years—" he began.

He was interrupted. "Uh, Major Bates," Herrold said, "the officer in question, Captain Robert Morlake, is in prison for a most heinous offence. It would be a grave setback for discipline if he were freed merely because he can fly a plane. Accordingly, I shall have him brought here, and no doubt he can teach you to fly the plane in a day or so. I want you to hold no conversations with him except on purely technical matters. You will carry a gun, and remember that the plane is more valuable than the man."

Bates saluted. "I'll handle him, sir," he said confidently.

The moment the rockjet was high enough, Morlake zipped her over into a power dive. Behind him, Major Bates clawed for the nearest handhold.

"Hey!" he yelled. "What the hell do you think you're doing?"

Morlake wasn't sure. He had decided at the moment he was sentenced to virtual life imprisonment that he would not accept the verdict of the court. But exactly what was going to happen now he didn't know.

"Now, look, Morlake," Bates said in a voice that trembled

slightly, "this is not going to get you anywhere. There's hardly any fuel in the tanks."

That was why he had wasted no time. Morlake said nothing, but sat blank-brained, waiting events. The day was clear as glass, the earth below plainly visible. It looked closer than it was.

"For God's sake, man!" The other's nerve was tottering badly. "You swore you still stood by your oath of allegiance to the United States."

Morlake broke his silence. "I do."

"Then what—"

"I happen to be the only man who knows how to find the enemy. If I let myself stay locked up, I'd be violating my oath."

It sounded wild even to Morlake. It probably seemed pure insanity to Bates. And Morlake did not fool himself. He felt emotional about this. It was not reasoned, objective, what he was doing. He had had a three-month's taste of a life sentence of hard labor, and the passionate beliefs he held, his justification for this, were rooted as much in horror of his fate as in patriotism.

The bomb had come straight down. If, as the experts maintained, it couldn't have come from Earth, then it had come from the Moon. Since that was not an idea to which Americans would take easily, it was up to the one man who knew the facts to persuade them.

His thought ended. He jumped, as he saw that the ground was really rushing towards him now. Behind him:

"Morlake, for God's sake, what do you want?"

"Your gun."

"Do you intend to kill me?"

"Don't be a fool. Hurry."

The earth was a huge valley, with rearing hills no longer looking so flat. Morlake felt the gun shoved past his shoulder. He snatched at it, shouting:

"Get back! Back, away from me!"

He knew that would be hard, like climbing the side of a house. But he waited while the sweating officer fumbled away from his seat. He could hear the man cursing with fear. And his own heart was pounding, his body rigid, when at last he came out of his dive, and began to climb towards the black regions of the stratosphere.

The stars were as bright as jewels before he leveled off and began his race with the diminishing supply of fuel. At the rockjet's most economical speed, thirty-five miles a minute, he sped through the darkness above an ocean of light.

He had two intermingled hopes: That he would be able to reach Kane Field and that he would find it deserted. The first hope was realized as the field swam into view in the distance. The second ended in dismay, as he saw that the entire area swarmed with men, with tractors, cranes, trucks and piles of material.

Morlake came down from behind a low hill some distance from the nearest group of workers.

"Get out!" he said to Bates.

"I'll see you hanged for this!" the big man snarled. But he got out. He did not move off immediately nor did Morlake. There was a prolonged silence, then:

"Tell them," Marlake said, "that I'm taking the plane because—because—" He paused. He felt a desperate desire to justify himself. He went on, "Tell them the top speed of Sadie is 47 miles a minute, and that she can climb 80 miles in 7 minutes plus, but tell them—" He hesitated, for if his words were given publicity, the unknown enemy would read them also— "tell them not to waste any more time building duplicates of Sadie. She isn't fast enough, she can't go high enough to reach the men who dropped the atomic bombs. And that's why I'm taking her. Because she's only a second-rater, and therefore worthless. Goodby."

He waved his hand. The vertical jets hissed with power.

The machine reared slowly, then the rockets fired several bursts, and the ground began to flow below like a tremendously swift river. Morlake headed over the hills, straight towards a place where there had once been pipes leading up from an underground fuel tank. Men were working there amid a tangle of twisted metal, but some order had already been established. He landed.

A foreman, a slim, rugged-looking young man, came over, and said, "Sure, we've got all the fuel you want. None of the tanks were busted by the earthquakes. Roll her over this way."

He was in no hurry, but talkative, curious. While his men attached piping to the tanks Morlake indicated, he asked pointed questions, which Morlake answered or evaded with a laugh. He knew how to talk to this kind of man, and the only trouble was that out of the corner of one eye, he saw Bates come into sight over the hill, and flag down a truck. The truck headed swiftly toward Morlake. When it was a third of a mile away, Morlake climbed into the plane.

"Thanks," he said.

The foreman waved cheerfully. "Give my regards to the general."

The truck was tooting its horns madly as the rockjet became airborne.

Morlake's sense of exultation did not last long. He had enough fuel to fly around the earth. But his problem was to convince the people in authority that only by inventing and building a spaceship could they ever again hope to be free of danger. Where, how would he start? What ought his pattern of action to be?

When he came right down to it, he hadn't really given that much thought.

III

NINE BULLET-PROOF cars drew up before General Clark's headquarters one day some ten months after the bombing. There was a scurrying of men from the first four and the last four. Everywhere guns showed prominently, as the guards drew a cordon around the center car. As soon as the maneuvers were completed, a flunkey hurried forward and graciously opened the door of the big machine. Then he moved back.

Senator Tormey stepped out. He frowned as he saw that no one had yet come out of the general's office to meet him. Then as the general himself appeared in the doorway, a smile wreathed the handsome though heavy face, and he walked over and shook hands with the officer.

"Got all the Morlake stuff ready to show me?" he asked.

"All ready," Clark nodded. "I'd have invited you to see it before if I'd known you were interested."

Tormey took that as an apology. He had come a long way in the past four months. On B-day he had called for martial law, to last for six months, and had then found that the army was not prepared to turn the government over to him at the specified time. The available press and radio echoed with the senators protests. He had no ambitions himself, but it was time for the government to be returned to civilians. As the ranking survivor of the federal congress, it was his duty—and so on And so on and so on.

That was the beginning. And as army ruthlessness, as personified by tens of thousands of officers, had as usual alienated ninety per cent of the population, the senator was

soon riding a crest of protest meetings, of which the army, in the person of General Clark, finally took cognizance.

The senator was invited to headquarters, and taken into the confidence of the military. He became a habitual member of General Clark's dice club, and his advice was sought on every important administrative problem. It was the army's bid for civilian support, and it seemed to work.

"This way," said General Clark, "to what we call the Morlake room."

It was a small room. There was a desk and a chair in it, and a filing cabinet. On one wall was a huge map of North America, with pins stuck into it. The red pins indicated that Robert Morlake had definitely been seen in those areas. The green pins meant that he had "almost certainly" been in the vicinity. The yellow pins were rumors, and the blue pins represented points at which a plane resembling S29A had been observed. Each pin was numbered and the numbers referred to a card index file, which contained a synopsized history of the hunt for Robert Morlake. The index itself was based on files of documents, which were kept in a cabinet beside the map.

"At first," General Clark explained. "Morlake's idea seemed to be to contact old friends of his. On the second day after refueling at Kane Field, he approached the residence of Professor Glidden in California. . . ."

After watching Glidden Grove one day, Morlake got up at dawn, and walked two miles to where the low, long building of Dr. Glidden's research institute spread beside the banks of a winding stream. A caretaker was puttering beside the open door of a stucco, Hollywoodish laboratory. He answered Morlake's query curiously:

"Dorman? He lives with the professor. I guess the cook will be up by this time. That's the house, over there."

It was a glassed, tree-sheltered bungalow. As Morlake

strode along a walk lined with towering shrubs, a woman emerged from a side path that led up from the creek, and they almost collided.

It was the woman who was startled. Morlake said nothing. Ninety-four days on the prison farm had frozen his nerves.

The woman was dark-haired and blue-eyed; she wore a wrap-around dressing gown and a bathing cap. "Mr. Dorman," she echoed. "Oh, you mean the secretary." Her manner became indifferent. "Probably still in bed. It's a habit of people like that to sleep until it's time to punch the clock."

Her tone was carelessly contemptuous. Morlake, who had been about to pass on politely, paused for a second look. She was not the world's most beautiful woman, but it seemed to him that he had never seen a more passionate face. Her lips were full and sensuous, her eyes large and bright, her manner immensely assured.

"Aren't you a little early," she asked, "for visiting the help?"

She was irritating, and Morlake didn't like her at all. "May I by any chance," he asked, "be speaking to Professor Glidden?"

The remark pleased her, for she laughed. She stepped confidently up to him, and hooked her arm in his. She said, "I'll ask the cook which room is your friend's. You mustn't mind me too much. I like to get up when the birds start singing, and it makes me cross to have to wait five hours before there's anybody to talk to. I'm the physical type. Immense energy; and the only reason my brain is any good at all is because I never worry. Do you know anything about endocrinology?"

"Never heard of it," said Morlake, truthfully.

"Thank God," said the woman. She added, "I've been swimming in the old swimming hole—enlarged by damming, cemented into a pool, and improved by a ten-thousand-dollar heating system for cool days and nights. Just a little gadget

of the professor's, hot and cold running water. Would you like to know all the local gossip? I've only been a guest twenty-four hours, but I already know everything there is to know here."

Morlake did not doubt it. He was beginning to be fascinated. It cost him an effort to keep his mind to his purpose. The woman said; "The world is absolutely wretched, detestable and incorrigible. Here it is little more than three months after B-day, and—"

"After what?"

"Bomb day. That's what the army calls it. You can't go on saying 'the day the atomic bombs were dropped,' or 'day of the catastrophe.' You can't even expect people to remember that B-day was July 17th, can you?"

She did not wait for an answer, for they had reached the house.

"Wait here," she said. "I'll slip into my bedroom, and open the living-room door for you."

Morlake did not wait. The moment she disappeared around the corner, he followed. It had taken him a minute to catch on, but he was too conscious of danger to be fooled by a fast-talking woman. She had recognized him, and she would probably telephone the police before opening the front door.

There were three patio doors along the side and all of them were unlocked, but only the third one opened into an unoccupied room.

He knew it was possible that the woman had snatched up a gun in passing, but he was beyond that kind of fear. . . . The situation in the living-room was ideal for melodrama. She was at the phone, her back to him, saying urgently, "Keep trying! There must be an answer!" Morlake put his hand over the mouthpiece, and took the receiver from her instantly acquiescent fingers. For a long moment the woman sat frozen, and then slowly she turned and looked at him, her eyes widened.

Morlake did not replace the receiver, but stood there holding it tightly. He said in a monotone:

"How did you recognize me?"

She shrugged. "Newspaper pictures all over the house. Your friend, Dorman, talking about you, saying he can't believe you're guilty. But you are, aren't you? I've seen desperate men before."

Where? Morlake wondered, but all he said was:

"Who were you phoning?"

"The police, of course."

Answering that required no thought.

"The police would have replied—" he began. And then he stopped, as the operator's voice sounded from the earphone. He jerked the instrument up. "Yes," he said. "Hello."

"The party the lady called does not answer," trilled the female voices.

Morlake said, "Are you sure you have the right number?" Beside him the woman gasped. Before he could guess her intention, she reached down, snatched the cord, and, with a jerk that must have jarred her body, tore the wires out of the box. . . .

In the Morlake room at supreme headquarters, General Clark paused in his narrative. Senator Tormey said slowly:

"Who was the woman? Did you find out?"

The officer shook his head. "I can't remember the alias she used at Glidden Grove, but that name and a dozen others that she employed are all in the index there." Clark motioned toward the cabinet.

"You think she was after Morlake?"

"Definitely."

"How did she happen to be at that particular spot within two days after Morlake's escape?"

"That," said the general, "was what worried Morlake. Then and there he abandoned his plan to approach old

friends of his, and attempt, through them, to build up the nucleus of his organization. He realized that he had been forestalled by a group that had anticipated his plans and made a thorough study of his life history. When we came on the scene we found that virtually every friend he ever possessed had been under surveillance on that morning. A hundred different methods were used to gain intimate access to the different people involved. It was very thorough."

"How do you account for their preparation?" The senator was standing with closed eyes.

"It is our opinion," said Clark, "that they intended to rescue him from the prison farm, and kill him."

"But how did they know about him?"

The general hesitated. "Our theory there is a little wild, but the men who have gone over Morlake's written statement and court-martial evidence grew interested in the flare of light that enveloped the plane immediately after the bomb had rebuffed Morlake's attempt to throw it off-course. We think that that light was used to take a television picture of the rockjet."

"Oh!" Tormey was silent. Finally, "What did Morlake do next?"

It was Morlake who broke the silence in the living room of Professor Glidden's bungalow.

"Where is your car?" he said.

The woman seemed resigned. "I'll get my car keys, and drive you back to your plane. I suppose that's where you're heading."

He went with her, conscious that he could trust no one, now that he knew. And that there wasn't time to talk to Dan Dorman, or to ask the questions he had intended to ask Dan's employer, Professor Glidden. He had come to Dan first of all, because of his connection with the world-famous physicist. Depressing to be here at the spot, and realize that he had to leave without having accomplished anything.

Ten minutes later, the woman parked the car a hundred feet from where Sadie was drawn up under trees. "It's a pretty plane," she said. "How fast can it go?"

"Just over a hundred miles a minute," said Morlake carelessly. "Get out."

"W-what?" She must have thought he was going to kill her, for she turned pale. "Please," she begged, "I'm as innocent as you are. I know nothing."

Morlake gazed at her curiously, but he said nothing. Let her sweat for a minute. He didn't have time to question her, and so he couldn't judge how deeply she was involved. Not that it would have made any difference. He was neither judge nor executioner. He locked the car doors, then slipped the keys into his pocket. He saw that the woman had regained control.

"It's only two miles," she said. "I ought to get there before breakfast. Goodby and—good luck."

He sent the rockjet straight up until the world was black, and stars were points of light above him. Then he flashed out over the Pacific, and, turning, came back in, coasting over trees straight into a deep arroyo. His new hiding place was less than half a mile from Manakee, California, the town four miles from Glidden Grove, where the telephone exchange must be located.

A bus coming along the nearby highway made his trip easy, and enabled him to inquire about the location of the exchange. . . . There were three girls at the switchboard. One of them, a washed-out looking blonde, said:

"Something went wrong with the line, so I drove in. Did you get the party?"

"Yep, I got her, then I couldn't get you."

Another woman! Morlake felt a thrill, then a sharp anxiety. It was as he had feared. The connection had been established. He hesitated, but there was no drawing back.

"Will you call again?"

"Sure. Got the number?"

Morlake was as ready for that as he could be. "Let me see. Hmmm, can't think of it offhand. But I have it here somewhere."

As he began to search aimlessly through his pockets, he saw that she was examining her notebook. She looked up.

"Never mind, I wrote it down. Lucy Desjardins, 476 Hartford Street, Crestolanto 9153."

For a moment Morlake could only trust himself to nod, then it was time to speak again.

"Just a moment," he said.

"Yes?"

"Did the party, uh, say anything, when you couldn't get her through to me?"

"Yeah, she said it didn't matter or something like that."

"Oh!" said Morlake. "In that case don't bother." He mustered a laugh. "She's a dammed touchy woman. I don't want to get her down on me again."

He went out, perspiring but momentarily relieved and jubilant. The feeling didn't last long. The woman had said it didn't matter. That meant she had understood. The gang would be swinging into action.

He hailed a cruising taxi, and had it take him to the suburbs. As soon as it was out of sight, he raced along the highway and across the fields to his machine. The moment he was inside the cockpit, he turned on the radar, and waited.

At first there was nothing. The sky was empty, except for a haze of immensely high clouds. After thirty-seven minutes, a shadow darkened the screen. It was too far away, too high to form a clear image. But it was unmistakable, and it moved along with great speed at a height of about a hundred and twenty-five miles.

Morlake kept spinning his radio dial, and suddenly it caught and stopped, as a voice said:

". . . Got away, looks like. We've been east and north

and south, and out over the water, and there's not a sign of anything moving. His machine must be capable of far greater speed than we believed."

The answering voice was faint. "Don't give up. Take nothing for granted."

A third voice broke in loudly, "Hey, who's that talking. This is army station Miklaw. Identify yourself."

There was a faint laugh from the nearest voice, then silence.

IV

For Morlake, hiding, waiting, planning, in the arroyo near Manakee, time passed slowly. It was a strangely sad period, one man alone wondering how he could convince a nation that he was right and their leaders were wrong. Ghosts of forty million dead adults and children haunted his dreams, but already the fact that they had existed was a shadowy fact in his mind. To him, who had no family, and who had had the experience of friends dying in a war, death was not the ogre that it was to those who had never been trained to face it.

Far more real than the death that had struck was the knowledge that out there somewhere on the surface of the Earth, cunning devil-men were waiting for the slightest hint that their identity had been discovered that, to save themselves, they must be prepared to rend the entire earth.

Their leaders would deny all accusations, would charge a conspiracy, and, with the tremendous advantage of control of the Moon, would be able to launch bombs toward any target at will.

Morlake quailed at the picture, and knew that his new plan to seek out the gang must parallel and complement his greater purpose of forcing a reluctant people to crawl up from the caves of fear into which their minds had collapsed, up to the special bravery for imagination that would be needed for the conquest of space.

At dawn, on his third morning in the arroyo, Morlake made sure the radar screen was blank, and then flew in a great circle around the Capistrano radar station of the army, to Crestolanto. He spent all that day watching 476 Hartford Street. It was a plain two-story structure, and during the morning it showed no sign of life. About mid-afternoon, a woman came out of the front door and walked to the nearby market. It was not the woman who had been visiting Professor Glidden's home, but a slim, distinguished-looking young woman with hair slightly greying at the temples.

When she had come back, he wrote a letter to General Clark, describing what he intended to do. He mailed the letter shortly after dark, and then he waited for black night. It was half-past nine by his watch when he crawled through a window, and moved stealthily toward the living-room, where a light was visible through a partly open door. . . .

Senator Tormey asked, "And then what happened?"

General Clark shook his head. "We have no direct information."

He pointed to a red pin rooted in a small west-coast city.

"There, Morlake made one of his four attempts to interest the general public. According to our reports, a woman did all the preliminary advertising for a lecture Morlake intended to give. According to our information, it was this second woman. The lecture was a flop. About a dozen people turned up, most of them old women, who thought it was a new religion, in which the Moon had been proved to be heaven."

"Then it would appear that Morlake and this, uh, nameless woman joined forces."

"Never," said the general, "have I had reports of a bolder couple. They were quite cautious at first. Now they're absolutely fearless."

The senator was silent. He wore contact lenses, behind which his intense blue eyes gleamed with alert fires.

General Clark walked to a window, and gazed out past the formal park toward the distant blue of hills. Without looking around he said:

"Last night you asked me about Morlake, and I invited you to come here. This is in line with the army's policy of cooperating with elected representatives of the people. As you know, we intend to permit the congressional elections next fall and the presidential elections in 1968, and so the country will resume its normal democratic functioning. What you do not know is that, though the elections will be held as scheduled, the announcement about them was made with the intention of lulling the enemy."

From behind him, Tormey said slowly, "I don't think I understand."

The general turned to face the bigger man. "When Morlake escaped with S29A, I received a garbled account of what had happened. It was so garbled, in fact, the loss of the plane so important, that I flew to Texas by jet, saw the court-martial papers of Morlake, and began to realize what tremendous information had been bottled up. Naturally, I relieved Herrold of his command instantly, and by the end of the week we had the information which I have described. Better still, our radar station at Capistrano saw the image of the enemy spaceship which was searching for Morlake, and so we had definite evidence that what he stated in his letter was correct.

"When Capistrano saw it, the spaceship was about two

hundred miles up. They couldn't estimate the speed, but it was terrific."

He went on matter-of-factly:

"Normally, we might have paid no attention to such a report. So many, many reports come in hour after hour to all military districts. But at this time, on the basis of Morlake's written statement to General Herrold, our experts decided that they had narrowed the possible origins of the bombs to three:

"Two of them were the likeliest points on Earth. If we decided on either of these, we'd have to assume that our men on our instruments for detecting radioactivity were at fault. We rejected these possibilities because the piles necessary for the creation of vast quantities of radioactive materials could not escape detection. That left the third alternative, which assumed the bombs to be of extraterrestrial origin. I accordingly ordered the design and construction of five spaceships, and since it was always just a matter of money, in this case a billion dollars a ship, we had no difficulty. The ships will be operational by next week."

The senator made a strange sound. It was not a word, and he did not repeat it. Instead, he walked unevenly to a chair and sat down.

"General," he mumbled at last, "you make me dizzy. You mean that all this uproar about Morlake has been unnecessary?"

"Very necessary." Clark was deadly serious. "His desperate efforts to get us to do something made it look as if we were paying no attention to him. We even ridiculed Morlake's propaganda. Personally, I think Morlake caught on, but right now I'd give a lot to have a talk with him. The time has come for coordinated action."

The senator said blankly, "But this means war."

"We'll smash them in one day," Clark said coldly. "No one else has dared to mobilize, for fear of rousing our sus-

picion. We'll put a million men into their cities overnight. We'll execute every man who had anything to do with the bombing of this country. For once, no one will have an excuse."

"And all this in about two weeks?"

"Possibly less."

There was a long silence. At last the senator climbed to his feet.

"It seems kind of funny after that, to talk of social activity, but are you still having your crap game tonight?"

"We don't dare change our habits now."

"How many will be there?"

"Six, besides yourself."

"Wonder if I could bring along a young friend of my wife's?"

"Why, sure. Which reminds me. When is your lady coming down here?"

Tormay smiled. "Couldn't tell you. She thinks I ought to retire from politics, and therefore she won't establish an official residence. She's pretty much of a traveler."

They parted on that note.

"Gentlemen," said Senator Tormey, "this is my friend, Morley Roberts."

There was a grunting response. Morlake sat down, and watched the dice bounce briskly from the far end of the table. He did not look immediately at General Clark, but concentrated on making his first bet. Presently, he picked up his winnings for the roll, and pressed his arm ever so lightly against the gun in his shoulder holster. It was still there, ready for the crisis which ought to come in a few minutes.

He lost twice in a row, and then won three times on his own roll. As he gave up the dice finally, he took his first good look at General Clark. A pair of eyes as sharp as his

own met that one searching glance. The general said casually:

"So it's me you're here to contact, Roberts?"

Morlake brought his hand to the edge of the table, with the fingers held slightly downward and barely touching the surface. From there it was one foot to his gun.

He said steadily:

"General, you're a smart man, but you haven't figured it quite right."

There was an undertone in his voice, the beginning of tension, the beginning of deadly intent. Like darkness blotting out day, the atmosphere of the room changed. Some of the officers looked at each other, puzzled. Senator Tormey said:

"It's getting warm in here. Uh, I'll call one of my guards and have him open the windows wider."

"I'll do it, sir." Morlake was on his feet, without waiting for acquiescence.

He examined the windows and, as he had expected, the "glass" was a bullet-proof plastic. What he did then was rooted in a profound discovery he had made during the previous six months: the discovery that if you say you will do something and then go and do something similar, no one will notice the difference—for a while.

Without a qualm, he closed and locked the three windows, and then he returned to the table. The dice rolled whitely against the background of the green cloth. Senator Tormey won from several of the officers. As he was raking in it, General Clark said:

"Morley Roberts. The name is familiar, but it is the face that makes a better identification. Suppose we change the name around a little, and say Robert Morlake, former Captain, army air forces, court-martialed, thirty years at hard labor. Am I getting warm?"

The general's voice went up, "Wait, gentlemen!" The men at the table froze, two with their chairs pushed back,

one with a hand under his coat. The senator was the first to relax. He was sitting at the side of the table, and he hummed a small tune under his breath. Clark said softly:

"You came here tonight as the guest of Senator Tormey. I presume he knows who you are."

"I'm sure," Morlake said, "that the senator must have recognized me, but you will know better than I if he's made inquiries about me in the last two days. But now I'd better hurry. Gentlemen, this is a dangerous moment, not because of me directly—I'm only a catalytic agent—but because my appearance gave a certain person an opportunity to carry out a previously conceived plan.

"It was my intention," Morlake went on, "that he should use me for this purpose so that I might use him for mine.

"A brief case history is in order: Picture a wealthy congressman, unscrupulous and with unlimited ambitions. It is very easy for him to think of himself as a man of destiny, frustrated by the stupidity of others. Having become senator, he discovered in two successive presidential campaigns that he had no chance to become chief of state. His wife began to suspect him shortly after she married him in 1959, and pretended to play along. But she didn't realize the truth until B-day. As you know, he was in a safe place on that day—very fortuitous. Afterwards, his main opposition was the army. It was clever of him to authorize martial law—which would have been done anyway. It was clever because he was later able to use it in his propaganda."

Morlake paused, and smiled to relax his eyes, to loosen his body, because the moment had come.

"His big opportunity came—it seemed to him—when I appeared on the scene, as guest of his wife. He saw it as his chance to kill General Clark and his staff, and throw the blame on me. I, of course, the highly publicized escaped army convict, would also be found dead, and—"

Morlake broke off. He said, "What's the matter, senator,

has your nerve gone? You're not going to go down like a weakling, are you?"

The sweat was almost a mask on the heavy face. Tormey brought his hand up, and put it in his vest pocket. He fumbled for a long moment. Morlake said:

"I see, senator, that you're activating your little radio, calling your agents outside."

As if to punctuate the words, there was a crash of bullets on the window. Everybody except Morlake jumped. Morlake said tantaliznglY:

"Too bad."

He reached across the table, and snatched a tiny instrument from the senator's vest pocket. The man grabbed angrily at his hand, but he was too slow.

"Hmmm," said Morlake. "One of the printed variety."

With a visible effort, the other man straightened. "Never heard such nonsense," he snarled. "You've arranged this drama with bullets against the window. If you think such a simple scheme is going to work against me, you're—"

He stopped. His eyes, staring straight into Morlake's widened. He must have realized that his denials were meaningless here, that the plans already boiling in his mind, to use the radio and the press, his control of the party, of the country, his skill at propaganda—all that meant nothing to this deadly young man. He had not even time to cry out in sudden terrified realization of his fate.

The two shots that Morlake fired broke the big man's lungs. Tormey slumped over on the table, then slid down to the floor. Morlake paid no attention to the armed officers in the room. They could have shot him as he knelt beside the dying man, but his very helplessness was his safeguard. They watched, their bodies rigid, and they must have been restrained, too, by the knowledge that he had acted with remorseless logic.

Morlake neither saw nor worried. The senator's eyes were open and staring widely. There was blood on his lips.

"Senator, what is the name of the enemy?"

That got them. General Clark came closer. An officer who gone to calm the guards at the door half turned back into the room. Even Senator Tormey stiffened.

"You can go to hell," he muttered.

Morlake said, "Hurry, man, you've only got a minute—a minute."

The horror of that struck deep. The thick face twisted. "Die!" the senator mumbled. "Why—I'm going to die." The idea seemed to grow on him. He struggled, gasping for breath, then subsided. He lay so still for a second that he looked dead. His eyes opened wearily. He looked up, and mumbled:

"Was that my wife . . . at Crestolanto, in that house?"

Morlake nodded. "She used your organization. She received all California reports. That enabled her to locate me no matter which local agent saw me first. She had decided that if I came to Crestolanto she would ask me to help her. It was she who toured the country with me for all those weeks."

General Clark dropped down beside Morlake. "Senator," he said, "for God's sake, the name of the country, the enemy?"

The dying man looked at him with the beginning of a sneer on his lips.

"The country has only one name," he said. He laughed a satanic laughter, that ended hideously in a gush of blood. Slowly, the big head grew limp, the eyes though still open took on a sightless glare. A dead man lay on the floor.

The two men, Clark and Morlake, climbed to their feet. Morlake said in a low voice, "Gentlemen, you have your answer." He saw they still did not comprehend what he had suspected for long now.

General Clark was grim. "When I think we've been giving him our inmost secrets for months—" He choked, and held out his hand. "Thanks."

Morlake said nothing. His first sharp sense of victory was yielding to an intense gloom. He grew aware that the older man's penetrating gaze was on him. Clark misread his expression.

"I know what's ailing you," Clark said. "But you're wrong. We have spaceships." He described the planned attack on the Moon.

Morlake nodded, but his depression remained. Such an attack would be necessary, to locate the launching sites of the bombs, and to find out where and how Tormey and his group had obtained them. But that was incidental. He accepted Tormey's last words literally.

The first atomic war had been, not an international, but a civil war. And now that Tormey was dead, the gang would scatter. A gang of Americans.

The war was over. Irrevocably.