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TARGET: TERRA

Laurence M. Janifer and S. J. Treibich

BEWARE THE BERSERK SATELLITE

Complete Novel

Orbital Station One was quickly going to pieces. The mechanicals were lurching, the gravity was fluctuating, the cook was in a drunken stupor, and the sex-suppressants had worn off. To top it all—the automatic missile launchers were aimed at every major city on Earth—and there was no way of re-directing them.

There were either aliens on board the ship, or a saboteur—and the Intelligence Officer didn't know which. He didn't know what was going to happen next either—he only knew it was going to be terrible!

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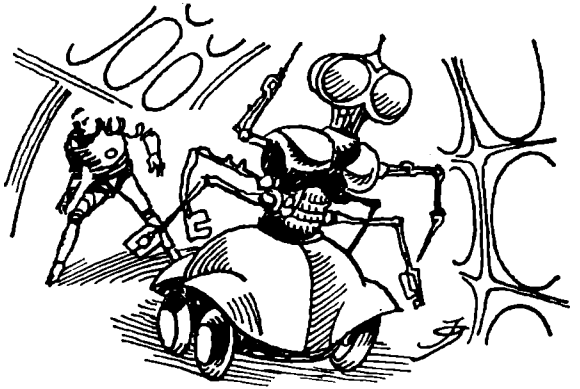

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THE PROXIMA PROJECT
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This is for
Barry Malzberg, with thanks,
and, of course, for Juli—
as always.

". . . There is, and will remain, some doubt among historians as to the actual existence of anything that might truly be called a Third World War. We have summed the arguments of both sides in this perhaps unimportant quarrel. In continuing, it may first be necessary to say that, in the case of the First Spatial Conflict, there is no doubt whatever."

—J. Tandler, *A Short History of the Solar Worlds*: Gorgon Press, Inc., Ganymede (2204), and Gordon FasTape, Ltd., Leyston (2205).

PART ONE

I

ANGELO sat, hesitantly, in the unexpected free-fall environment of the Station, and wondered whether or not to burst into tears.

After all, what else was there to do? The Station was going to the dogs, whatever they were: the mechanicals were acting in a manner that could only be described as totally insane; the relief crew hadn't arrived, and wasn't likely to; and Angelo himself was developing, of all things, a magnificently impressive set of the sniffles. He very nearly thought of asking, "What else can happen?" but he knew better than *that*. That particular question always, always had an answer —and, for the most part, a rapid one.

Quickly enough, he discovered that he had no need to ask the question. His off-duty time was, theoretically, his own; but, given Captain Zugzwang—and given the odd set-up of the Station in recent days—the theory didn't really apply to real life. Real life, in fact, was made up, as always, of one little disappointment after another. Or perhaps, Angelo told himself in a musing fashion, *disappointment* was not the word. *Melodrama* might be better. Or *tragedy*.

There was nothing to be gained by fiddling with words, but such musing was an old habit of Angelo's—one, in fact, which had made him think several times that the life of an Intelligence officer was something he wasn't really suited to.

Captain Zugzwang, however, didn't think of matters that way. Captain Zugzwang . . .

The intercom crackled. It was not supposed to crackle, but that hardly mattered. Angelo didn't like the sound, but that didn't matter either. Nobody cared what Angelo liked —sometimes, he thought, not even Angelo himself.

The intercom cleared its throat. It coughed. It wheezed a little and made a few thoroughly improbable sounds. Angelo remained in his precarious null-G seat and, with enormous patience, waited. At last he was rewarded, if that's the word; the message came through. Without even much static. Every word was simple, clear, and to the point.

"Mr. DiStefano," it said, "report to the Captain at once. This is an order. This order takes precedence over all other duties. Mr. DiStefano, report to the Captain at once. This is . . ."

"Yes," Angelo said sadly. "I know." Nobody heard him. He sighed, reached under his chair for his magnetic shoes (sooner or later the gravity was going to be fixed, the Captain kept saying; he'd been saying that for nine days) and slowly, with immense labor, tied the massive things onto his feet. He—

No, he didn't stand up. Instead, he did a thoroughly unexpected backflip and found himself hanging upside down, his shoes firmly attached to the ceiling.

The intercom coughed again, and presented him with a sound very like a raspberry. "Mr. DiStefano," it said, "report to the Captain at once. This is an order. This order—"

"Right," Angelo said. "Yes, sir. Instantly. Fellow members of the Upside-Down Cake Brigade, forward."

He began to walk. Two steps were enough to show him that reversed locomotion was not really possible. The dizzying lack of orientation was enough, but the insistence of the blood that it pump itself backward, or upside down, or something, was a distinct addition. The Station wasn't actually in zero gravity: that would have been too simple. It was at about one-twentieth—just enough for discomfort, and not enough for anything else.

"Mr. DiStefano—"

Well, if he couldn't walk upside down, how was he going to get to the Captain? For that matter, how was he going to get to the intercom to inform the Captain that he couldn't get to the Captain? Or to inform the Captain that he couldn't even get to the intercom . . . or to . . .

His mind began, very slowly and steadily, to spin on a previously unknown axis. The intercom kept having regular

attacks of asthma, followed by attacks of message. It took Angelo fully ninety seconds to come to the proper, the obvious conclusion.

Remove the shoes.

True, this would leave him with a neat, unavoidable fall to the deck (a slow, one-twentieth-gravity fall, but a fall nevertheless); but it would leave him able to walk, or float, or something, through the corridors to the Captain. If he didn't get a nice little concussion first . . . but why should he, he asked himself, in so small a gravity environment?

This led instantly to the question of why the gravity was so small in the first place. Heroically, Angelo refrained from considering that. Instead, he unbuckled his shoes.

The drop was not too hard. Just, he thought, hard enough. But at least his shoes were up there on the ceiling, and he could continue on to the—

No.

His shoes, for reasons, apparently, best known to themselves, picked that second to detach themselves from the world above, and come down like very slow bombs.

They missed Angelo by about half an inch, and landed on the floor, where they sat innocently, as if nothing out of the ordinary had happened.

Well, what danger was there in it? "What *else* can happen?" Angelo said bitterly, and, barefoot, went off down the corridors to see the Captain.

Unfortunately, the corridors weren't quite themselves, either.

For one thing, there weren't any lights.

In one-twentieth gravity, there is only one way to walk.

Carefully.

Angelo DiStefano started very slowly down the dark corridor. Somewhere ahead, he was sure, there were Things. Perhaps, he told himself, one of the Station personnel had a background that included Transylvanian relatives. Who could be sure? And perhaps the relatives—vampires, they might be, or large, carelessly sewn monsters, or small fluttering impossibilities that laughed—had come to visit the Station. If the stories about such beings were even halfway true, they wouldn't require suits, or even ships; they might even be immune to the (Angelo nerved himself, thinking what had always seemed to him the single silliest sounding phrase in the English language) anti-missile-missiles. Perhaps they were already on the Station. Waiting. Or else . . .

He told himself he was being foolish. But an almost-weight-

less walk down a black and lonely corridor was not terribly conducive to rational thought. There were no such things as vampires, or Jiffy Home-Built monsters, either. But there might be. At that moment, in that darkness, Angelo was practically sure there were.

He took a deep breath. After all, the bridge wasn't so much further, was it? Only a few hundred miles, or maybe a few hundred thousand miles, or maybe . . .

The corridor was entirely silent. Angelo, barefoot, heard nothing but his own breathing. The silence seemed to be waiting for something. If only, Angelo thought quietly, the Thing would pop out right away and eat him and be finished, it wouldn't be so bad. But these Things had such a love for suspense. . . .

Quiet.

Silence.

Ten steps. Twenty. Forty.

Forty-one. Forty-two. Forty . . . what?

The suspense was beginning to end. Behind him, in the eerie darkness of the long corridor, Angelo heard footsteps. Heavy, metal footsteps. Made by . . .

The Captain? No. Captain Zugzwang was on the bridge. Dr. Emmis? No, this was a sleep period for the medical officer and bacteriologist, and Dr. Emmis never, never missed a chance for a sleep period. Juli R. Dental? No, the ecologist would be off someplace where there was some ecology to study. Korkianovich? No, the cook would be . . .

Somewhere else. All six of the others would be elsewhere. None of them would be in the corridor. None of them except Angelo DiStefano, Intelligence officer . . . and the Thing.

Angelo swallowed. Hard. He decided to take one more stab at a happy ending, and winced at his own choice of words. *Chance*, maybe, or *gamble*. But *stab*, now. . . . "Hello, there," he said. "Who's that back there?"

There was no answer. Angelo kept walking. The footsteps kept following him. The heavy, metal footsteps of a . . . well, all right, he told himself grimly, determined to face the worst now that there was nothing else left to face. The footsteps of a Thing. A Thing that was going to laugh, and pull Angelo limb from limb, and drink his blood, and make him into a zombie or a pariah or a full-blooded Asian or . . .

Or nothing more than a scattering of bloodless limbs in the darkness. Angelo tried to decide which of these several alternatives he preferred. While doing so, he began to walk a little faster.

The footsteps maintained their steady pace. *Maybe*, he

thought with a distinctively unbelieving sense of ease, *maybe I can outrun them.*

It all depends on what kind of Thing is back there, he reminded himself. Some of them were sort of slow, but the others . . .

A flashlight hung by his belt. Angelo fumbled for it, without breaking stride. In order to get the flashlight out, he knew, he'd have to stop and fumble with the clasps that held it firmly under any circumstances—clasps which had been widely praised, but which seemed at the moment to ignore the essential requirement. Angelo imagined himself questioning the manufacturers, back on Earth. "Suppose you were being chased by a Thing," he'd say, "and you had to have light. Wouldn't it be better to have that light easily and quickly available?"

The manufacturer, a small fat man with piggy little eyes and an unpleasant, sickly leer, bowed his head, abashed. He'd never thought of that.

On the other hand . . .

The footsteps continued. Slow, steady, remorseless. Angelo found a wall and leaned against it, plucking feverishly at the flash-holder. A great deal of time went by—about, he estimated, fifteen days. The footsteps continued to approach.

And then he had the flashlight out and ready. If he'd had any sense, he told himself bitterly, he'd have readied it before he stepped into the dark corridor, and avoided all the delay. He had no idea what Captain Zugzwang was going to say when he arrived at the bridge fifteen days late.

But then, of course, he wasn't going to arrive, was he? The footsteps were closer . . . closer . . . closer. . . .

Angelo snapped on the light and pointed it straight at the sound behind him. Then he snapped it off again.

It was better not to know, he assured himself. Much better. In his wildest dreams, he had never imagined—

But he couldn't forget the picture. Dropping the flash he turned again and ran for the bridge. The clatter of the flash's fall reached him when he had been running for some seconds.

And the footsteps continued, marching down the passage.

The heavy, metal footsteps made by his own magnetic shoes—following him under no power whatever, he thought, but their own.

The door of the bridge, when Angelo reached it in some disarray (it is not easy to run under one-twentieth gravity, even at the best of times, which this didn't really seem to be),

looked like the opening to a haven. He dialed it and went through the dilation.

His shoes, a little behind, stopped before the door.

II

THE door shut, leaving the shoes behind. Waiting, Angelo thought. Waiting for him to come back, when they would leap up and kick him between the eyes. Or start crawling up his shrinking body, drinking the blood as they went. Or . . .

Angelo, trying very hard not to think of the shoes, came to a full stop by grabbing a handhold at the wall near the Captain's desk. The Captain didn't seem to notice him. The Captain was staring at a loaded plate which steamed merrily before him.

What the plate was loaded with was, Angelo thought, a very interesting question. It was pink in places, green in others, and over one large area a bright, shining, metallic blue. There seemed to have been small snakes in its ancestry, or just possibly large worms. Parts of it were mashed flat, though, which made full identification difficult. Angelo was about to ask the Captain what he was eating when he noticed that the Captain wasn't eating. Instead, he was cursing—or doing what passed, with Captain Zugzwang, for cursing.

Captain Zugzwang had an orderly mind, and a mind which contained no patience for what he was pleased to describe as superstition. In fact, he never even soiled his thin lips with that meaningless word, "Goodbye." Also, as he had explained a good many times, he saw nothing derogatory in natural human functions. This combination of qualities left him very little cursing room, but what room there was he used magnificently.

He was reciting, in a voice filled with loathing and disgust, a chain of random numbers—the ultimate insult to an orderly mind. Angelo, fascinated, listened.

"Eighty-four," the Captain said. "Seventeen. Nine hundred and fifty-nine. One hundred and seven. Sixty-three."

"Sir," Angelo said, letting go of his handhold now that he was standing still.

"Five thousand, four hundred and seventy-four," Captain Zugzwang said with fantastic passion. "Eighty-seven. Six thousand."

"Sir," Angelo said, and saluted. This was a mistake. A

sharply snapped salute, in so small a gravitational field, results in a quiet, almost lazy, somersault. Angelo said "Eep," grabbed for his handhold, and missed it. This set of motions had the effect of increasing the spin. Whirling cheerily through the air on what seemed to be a collision course with the Captain's steaming snakes, Angelo said, despairingly, "Sir. Sir, please. Sir?"

Captain Zugzwang looked up, his whole body coming to rigid attention as he did so. He stared at Angelo with great irritation. "DiStefano," he said, "what is this?"

Head downward for the moment, Angelo said "Snakes," and then regretted it.

"Snakes?" said Captain Zugzwang.

"Well," Angelo said, "I only thought—"

"True," said the Captain. "You only thought. You did not announce yourself. You did not salute. You only thought. About snakes, for some brainless reason. DiStefano, I must tell you again: I will have order on this ship. If it requires penalties to exact that order, then there will be penalties. It is for your own good I tell you this, DiStefano."

"Yes, sir," Angelo said. "But the numbers—"

"Numbers, DiStefano?" said the Captain with no decrease in irritation. "Have you come in here to count snakes? Numbers of what, DiStefano? Numbers of what?"

"The numbers you were talking about," Angelo said. The Captain stared.

"Talking about? I was talking about order, DiStefano. Order and discipline. If you cannot hear me correctly, perhaps there is some defect in your aural structure. Perhaps you should have this looked into, DiStefano. It is for your own good I tell you this. Perhaps you should have this looked into." And Captain Zugzwang sat back with a nod of righteous satisfaction.

Angelo sighed. "I mean—" He tried to remember. "Eighty-four," he said. "And seventeen. And five thousand, four hundred and—ah—seventy-four."

"DiStefano," said the Captain ominously, "are you cursing at me?"

Angelo said with great rapidity, "No, sir. No. But the numbers you were—the numbers you were using, eighty-four and seventeen and all those—sir, they aren't random."

The Captain froze. Steam rising from the plate of particolored snakes screened him for a second. Angelo, having slowed his rotation, had come thankfully to rest about four inches from the corner of the Captain's magnetic-topped

desk. He stood as nearly at attention as he could manage, and waited for the explosion. It came. "Not random?"

"No, sir," Angelo said. "They're all either divisible by seven—"

"Seventeen is not divisible by seven," Captain Zugzwang said witheringly. "Nor is eighty-seven. Nor is—"

"Yes, sir," Angelo said. "But the ones that aren't have seven in them. All of them do, sir." Well, he told himself, it had been necessary. But why—why in the name of all the gods in whom the Captain did not believe—hadn't he been born with no head for mathematics?

"Hmm," Captain Zugzwang said. He said it several times. Then, brightening, he found a new set of sounds. "Nevertheless," he said, "you didn't salute. You came in here talking about snakes. This is insubordination. DiStefano. You cannot be allowed to continue such blatant disregard for duty. You will stop chattering about snakes, DiStefano, and you will *salute*."

The salute might even have worked, if Angelo hadn't begun—due, he supposed, to the steaming snakes—to cough. The combination of a coughing spasm and a sharp salute shot him into evolutions previously undreamed of, evolutions which the Captain watched with an increasing unfriendly eye.

Not, Angelo thought as he spun, that Captain Zugzwang could ever be described as exactly *friendly*. Even at the best of times, there was a certain thin-lipped repugnance that surrounded the Captain, as if he had been one of the unfortunate and unwilling developers of Compound Delta, the Compound which had made *Asian* a dirty word and kept the Stations necessary.

"DiStefano," Captain Zugzwang said with a brittle disgust, "stop that. At once."

"Yes, sir," Angelo said, and had the sense not to salute. He grabbed for the handhold and, as he realized that it was eight feet behind him, touched the Captain's desk instead. Somehow he held on, spun right-side-up, and stopped, facing the plate of snakes.

"DiStefano," said the Captain, "you are unfit to be an officer aboard this Station."

"Yes, sir," Angelo said hopefully.

"You are a blot on the very name of Intelligence."

"Yes, sir," Angelo said. At last, he told himself, he was being appreciated at his true worth. More, the appreciation might get him kicked off the Station and somehow returned to Earth itself—despite the impossibility of sending any

rockets whatever through the atmosphere without having seek-and-destroy anti-missile-missiles (and there it was again: *why* wasn't there a less ridiculous name for the things?) erase the rockets. Angelo determined that he would open a used car lot with the remains of his pay. Cars, after all, never even left the ground any more. He felt quite homesick for things that didn't leave the ground.

"More, DiStefano," said the Captain, "your request is refused."

Angelo blinked. "Request?"

"For"—the Captain's tone made a mockery of the words —"travel pay, DiStefano. Travel pay."

"But, sir—"

"No more," the Captain said with haste. "Eight cents a mile, indeed! DiStefano, the idea is ridiculous."

"But, sir, we *are* traveling, and—"

"Request," said the Captain, "refused."

There was a brief silence. Then, filled with new hope, Angelo asked, "But, sir, in that case, how about flight pay?"

The Captain's mouth opened and shut again. Angelo, remaining upright for a change, waited. At last the Captain said, in a disbelieving voice, "Flight pay?"

"Sir," Angelo said, "we *are* flying, and the regulations state—"

"We are not flying," the Captain said.

"An Orbital Station—"

"Uses no power, DiStefano," the Captain said. "No power. We are—it is ridiculous for me to explain this to you—we are not a powered craft, DiStefano. Flight pay does not apply to gliders."

"An Orbital Station," Angelo said, with the feeling that reason was leaving the world entirely, "is not a glider. Sir."

"According to military law," the Captain said, "an Orbital Station is a glider. Let us have no more of this, DiStefano. No more of this."

A vast fortune glittered for the last time before Angelo's inner eye, and vanished. "Yes, sir," he said.

The Captain snorted with satisfaction. "Now, then," he said. "I called you here, did I not?"

Wondering what would happen if he said "No," Angelo contented himself with an affirmative nod. Probably the Captain wouldn't even have heard a negative reply: the Captain had the interesting faculty of becoming deaf and blind to things he didn't want to see or hear.

"Very well," said the Captain. "Perhaps you can show yourself fit for some sort of duty—unlike Korkianovitch."

Angelo didn't ask what Korky had done. The plate of snakes was evidence enough of that. "Yes, sir," he said. Conversations with Captain Zugzwang sometimes seemed to require a remarkably small vocabulary.

"I called you here to gain from you an evaluation of Asian targets, DiStefano, and to receive the present status reports from Station Two." Captain Zugzwang sat back and waited.

"Target evaluation unchanged, sir," Angelo said, neglecting to mention that he hadn't checked the Target Identification Center since the Captain's last call for a report, three hours before. Regulations, anyhow, said that he only had to check it three times a day; any other reports were entirely beyond the call of duty. At any rate, he hoped they were. With Captain Zugzwang, one could never tell. "And Two hasn't answered any signals, sir. But that may be because Communications isn't functioning properly, sir." Angelo tried to recall the last time Communications had functioned properly. It had been, he realized, a long, long time. Shaw kept sending along hopeful reports when anything at all got through, but very little seemed to come of them.

"Ah," Captain Zugzwang said. "Very well, DiStefano. Very well. I expected nothing else."

"Yes, sir," Angelo said, hoping it was the right thing to say, but knowing perfectly well that it was the only thing to shove into a hole in the conversation. Somehow, it managed to fit virtually every contingency.

"However," the Captain went on in a softer, more dangerous tone, "I must also speak to you about the lecture and visual aids course, DiStefano. I must speak to you about that, and once again I am disappointed in you."

Somewhere, Angelo remembered, there had been a course in something or other. He tried valiantly to remember what the course had been in, or why he hadn't bothered to go to it, and managed to recall that it had taken place midway in his sleep period. As for the subject of the thing . . . No. Nothing remained.

"It is an important course," the Captain went on. "It should not have been missed."

"Yes, sir," Angelo said, trying to remember.

The Captain set his mind at rest. "All of us," he said sententiously, "should know something about water navigation. One should be prepared, DiStefano—prepared."

"Yes, sir," Angelo said, telling himself sadly that, if the Station ever managed to drop out of orbit, water navigation was not going to do anybody any good. But, then, nothing

else was, either; the course made easily as much sense as anything else did, after eight months of what should have been a three-month tour of duty on the Station.

There was something about that figure of eight months that nagged at Angelo, but, once again, he couldn't locate it. Well, there were more important things. . . .

Like Captain Zugzwang's calm order that Angelo make up the course during a free period. Well, Angelo told himself, there wasn't all that much else to do. And if he got seasick watching the slides, he was sure Dr. Emmis would come up with something. Possibly, he thought hopefully, even something lethal.

Captain Zugzwang returned to the contemplation of what should have been, and obviously was not, a meal. Angelo, dismissed, headed for the door, feeling, for about thirty seconds, even a little relieved.

Things could have been worse, he told himself. They actually could have been.

And, very shortly, they were.

III

SOMETHING, Angelo told himself as he tripped over the magnetic shoes which had faithfully waited for him outside the door, something was wrong with the Station. It wasn't only the gravity, or the strange food, or all the rest of the events he'd been watching. It was a good deal more than that: it was the working of the Station itself.

Look, he said to himself with patient logic, as he decided to leave his shoes where they were and go on barefoot. (After all, who knew where shoes that could walk by themselves might decide to walk once they had somebody inside them?) *Look, the place is falling to pieces around our ears. This Station has stood up here for fifty years and more, and it hasn't had any trouble. Anyhow, no trouble like this. There was the time a Communications officer smuggled a harmonica aboard and made life hell for a while —but that was normal. That,* Angelo told himself firmly, *a man could understand. But now the place is going entirely to pot.* He paused for a second and then, all alone, whispered: "It's almost as if someone had a plan to wreck the place. Someone—or *something.*"

After all, the mechanicals weren't working dependably, lurching all over the place, whining now and then with

some electronic-discharge disease, spilling things and setting dials a little wrong now and then. And the galley was tossing up stuff like the Captain's snakes, now and again. There was, he realized, quite a list. And all of it was new, all of it had begun since Angelo himself had come aboard the Station with the new complement.

Now, that's silly, he lectured himself. *It can't have anything to do with me. Nobody's after me. Why should they be?* He ignored the creeping whisper in his mind which asked *why not?* and went on. *Maybe it's just being up here for eight months—unable to get down until somebody develops a rocket that won't be hit by the damned automatic —ah, well, what can you do?—anti-missile-missiles. Maybe the Station is just getting overworked.*

And maybe . . . well, Angelo told himself nervously, *maybe anything at all.*

There had been strange clankings now and then, here and there throughout the inner sphere of the Station, where human beings could live (as against the space between inner and outer spheres, where only mechanicals, or humans in protective suits, could survive. With that, Angelo thought thankfully, he had little or nothing to do). And there had been those walking boots. Which were—

No, he told himself. The boots were quiet. Resting. Back in front of the Captain's door. He considered telling the Captain about the boots, but got a fairly accurate picture of what Captain Zugzwang would say if informed that a pair of boots waited outside the bridge, probably ready to spring at him bloodthirstily. Captain Zugzwang had an orderly mind, and to an orderly mind the idea of bloodthirsty boots simply did not occur.

At any rate, the boots were quiet—which was something to be thankful for. Behind him, there was silence.

Ahead of him, on the other hand . . .

Step. Step. Step.

Angelo's precarious hold on calmness dropped away. "No!" he shrieked. "You won't get me! I'll put a spell on you! Stop! You'll never take me alive!"

And a voice said, "Where? What? *Help!*"

The voice came from the same general place the footsteps were coming from, dead ahead. Angelo fumbled for his flash, remembered (for the fourth time) that he'd dropped it, and stood stock-still. "Is—is that you walking?" he asked.

"It's me," the voice said. "I'm—Angelo, what's wrong? Who's chasing you?"

With an enormous sigh of relief, Angelo said into the darkness, "You are, Juli. I guess I just got carried away."

The no-nonsense voice of the Station ecologist replied, "And don't you wish you could be—away, and back to Terra the old firma. My flash broke down, and there don't seem to be any working recharge plates."

"It doesn't matter," Angelo said, still light-headed with relief. "I'm over here, Juli. Come on, and we'll brave it together."

This, he discovered without surprise, was a mistake.

Angelo took Juli's hand. Finding it was difficult enough in the darkness, but he managed to grope successfully and felt his fingers close around something warm, and soft, and fairly small. For one horrid second he wondered what he would do if the warm, soft, small thing turned out to be—well, turned out to be a warm, soft, small Thing. But Juli's voice seemed to wipe away all worries, for a second or so.

"Angelo," she said, "what's wrong? Has it—has it happened already? Or—"

Angelo froze. "Has *what* happened?" he asked. "The Station's gone crazy, but we've known that for days. Weeks. What's all this?"

Juli appeared to hesitate. At last she murmured, in a tone quite unlike her usual careless abandon, "Maybe . . . maybe I shouldn't tell you." Angelo snorted with a kind of hopeless contempt.

"Shouldn't tell me?" he said. "After what I've been through, Juli, believe me—nothing whatever is going to come as a shock. Nothing whatever."

"But, Angelo—you must mean that it's begun, and—"

"What's begun?" Angelo said through his teeth. "Look, Juli. I've been followed by my own shoes. I've had a communicator give me a raspberry. I've faced down a plate of cooked blue snakes and even managed to escape from Captain Zugzwang's idea of order. If you mean anything like that—"

"Oh," Juli sighed with relief. "Just—just *those* things?"

"Just," Angelo said bitterly. "Only. If you think those are small things—"

Juli sounded as if she'd been taken about six inches aback. "Oh, Angelo, I didn't mean that. It's just that—well, I've been so worried, and I keep thinking we haven't got much time before it starts—in fact, it should have started already, and I simply don't know—"

The panic in her voice was totally unlike the Juli Angelo

had grown to know and slightly dislike. "Tell me about it," Angelo said, and tugged at her hand to begin the long walk back. "For that matter," he added, "what are you doing up here near the bridge? I thought—"

But what Angelo thought was destined to be lost to the world, to Juli R. Dental, and even to Angelo. As Juli followed his lead down the corridor, Angelo continued, for about one second too long, to pull at her hand.

"Huzzah!" Angelo cried as the tangled spin began for them both. "Long live the revolution!" Juli, more restrained, and, possibly, less practiced in this acrobatic error, said only: "Eee!"

They spun slowly, almost grandly, about a common center. Juli tried to get her hand free, but Angelo, feeling that this warmth was his only remaining contact with a real world, in which people actually walked upright *and went on doing so,* gripped her more tightly. They whirled merrily down the corridor, away from the bridge door, Juli's shoes sounding off with an occasional *clunk* as they came into contact with wall, ceiling or floor, and Angelo trying desperately to keep both himself and this strange girl (after all, what could she be frightened about?) undamaged by collision, and pointed more or less in the right direction—whatever that was, in the darkness. One-twentieth gravity is not really enough to maintain orientation in the absence of vision.

"Flash," Angelo said, remembering too late that Juli's was out of operation and his out of sight.

"Fl-fl-fl—" Juli began, and went on: "Ooh. Yee. Gah." Shoes went *clunk,* and the fiber glass coating of two metal fiber suits went *wssh* as it touched the corridor, or itself.

Angelo said, "Never mind," wondering if he were right-side-up or not. In the distance there was a faint glimmer of light. A room door open? But whose? Angelo wondered. Where? Why? Until he could figure something out . . .

At that second the corridor lights flashed on, blinding both parties.

Angelo, his eyes blinking rapidly, said, "Look, if we can only—" and, wonder of wonders, the gravity changed.

In something like ten seconds the field built up past one-twentieth, past one-tenth, one-half, three-quarters . . . past the normal one gravity, and right on up to double. It was something of a miracle, Angelo thought, that no bones were broken—that is, if you cared for miracles. He was slammed against the floor, facing up at the lights, trying very hard not to pass out. Somewhere near him Juli had gone *whoosh,*

clunk and *grr* as she, too, came plunking down on metal. Maybe, he told himself hopefully, she was unconscious. He had to stay alert, to help her, to move them both to some safe place, but it would be nicer for Juli if she didn't know what was happening. Under two gravities, Angelo's small frame felt as if it were being soaked slowly into the metal floor. Juli, whose frame was a good deal ampler, would be in even worse shape. If she were—Angelo blinked again, began to be able to see, and called, "Juli!"

Her reply was a faint, determined gasp. "Don't try anything," she said. "Not—not *anything.*"

It seemed a very strange time for an argument. "But, Juli," Angelo gasped. "I've got to get you—to get us—somewhere—"

"No," Juli said. Angelo managed to wriggle toward a wall and then, using the metal as a support, to pull himself into a highly uncomfortable half-sitting position. Juli lay staring at the lights, breathing in large, startling gasps, about five feet away. She looked . . . she looked . . .

Angelo stared. Even under two gravities, even on an Orbital Station gone mad, Juli looked, suddenly, very female indeed. He wondered why he hadn't noticed it before.

Then he remembered.

"Eight months," he croaked. Juli spoke without raising her head; as it was, Angelo thought with admiration, she had quite enough to raise.

"Then you do know," she said.

"I've just figured it out," he said. "The suppressants were stockpiled for double the usual duty time, six months. And now—"

"Now," Juli said, continuing to fascinate Angelo, "now, there aren't any more suppressants. We're—we're resexed, Angelo. And I want you to know this: don't try anything. Not anything. At all." It was an exceptionally long speech, for the situation. Angelo watched the girl, admiring the way she breathed.

"Who?" Angelo said. "Me?"

"Anybody," Juli whispered. "The sex-suppressants were exhausted two months ago. I've been waiting, and waiting. . . ." She sounded, Angelo told himself with disbelief, almost wistful.

"Eight months," he said, very carefully, "is a long time."

IV

EIGHTY YEARS had been a lot longer.

Eighty years before, the world had been, Angelo sometimes thought, nice and simple. In those days there had been nothing to worry about except nuclear weapons, a small war or two, and the rising specter of a Third World War, big enough and shattering enough to destroy civilized life on Earth, and maybe all life, altogether.

Nice. Simple. Almost, in fact, neat.

Then, very suddenly, people started to die.

It was possible that somewhere, somehow, some determined band of men knew from the very start what had begun to happen, and simply kept quiet about it. It was even possible that the whole affair had been the result of a single, horrible laboratory accident—or that it had been the entirely unplanned and unseen mutation of a virus.

Anything, in fact, was possible, and probably always would be, Angelo told himself. But the end, no matter who or what had been around for the beginning, would always be just the same.

The end was death. Not for the first time (physicians, bacteriologists, research teams talked learnedly about sickle-cell anemia), but for the fastest, the most massive, and the most shattering time, the end was death not for all men, but for men of a particular kind.

Asians died. Despite the fantastic growth of WHO, of public health services, of a thousand and more hurriedly formed groups to isolate the cause, to isolate one Asian man, one Asian city, from all others—despite every thinkable effort, Asians died. The process took very nearly three years, and by the end of that time the dead numbered between seventy and eighty percent of the Asian population. Chinese, Indo-Chinese, Japanese, Malayans . . . half the world's population sank into darkness, and did not rise again. Nor were others immune; distance, citizenship meant less than nothing. Frenchmen, Americans, Russians (oh, a sweeping range of Russians, from Lvov to Petropavlovsk, from Nordvik to Samarkand, *Mátushka Sviatáya Rus,* Holy Mother Russia, mourned for her children, her full-blood, half-blood, quarter-blood Asian children)—all, all were introduced into the same earth, into the same end. Why, all were dead, and where's the purpose of so great a sorrow? For, in the end, the cause was discovered (though not the cure

—never, as yet, the cure), and from this discovery sprang, in fair exchange for all so many souls, a scattering of research papers two miles wide, and a half a mile thick—a scattering that would have hidden the earth beneath itself, if it had been let to do so, and so much of the world's beginning: Asia, cut down, destroyed, made black and shrunken: Asia, forgotten.

And yet, not quite. For the dead, in parting, gave to all their waiting remains a gift: the gift of land, of room, of food. The groups of lowest resistance (as referred to in more than half the research papers, as casually ticketed and tossed away as if they had forever been the numbers to which research had now reduced them) died first: the old, the very old, and, too, the very young. And then the others, dropping away from the race, leaving behind them land for the taking, room for the eyes and the legs, and all the million on million of rice-bowls, filled now against nobody's coming, five times filled—and waiting. As once the Chinese made their gifts of food to all the spirits of the distant dead, so now the dead, in China and in all the Asian world, returned the gift. And China starved no more. And India was nourished, and the rest.

Twenty to thirty percent remained, scattered over a total land mass so large that all communication stopped. If WHO had been left, if the various organizations formed and sent had been left, they and their tools would have kept alive a spark. But no Asian country was prepared to allow non-Asian nationals to remain, under any circumstances which also allowed them to remain alive. A good many helpful workers were killed during the three years of the plague; more were warned off, forbidden entry, or otherwise kept from setting foot on the graves of Asia.

For the Asians knew—with that sort of knowledge which does not wait on facts—that the non-Asians were responsible for what had happened. As far as the remaining Asians were concerned, the disease had been, in all truth and in all remembrance, the Third World War, the war everyone expected, and no one, apparently, had been willing to fight.

The hatred which sprang from this belief, from this knowledge, prevented the continuance of communications, that link which preserved, virtually alone, what had been (and, in non-Asian countries, still was) modern civilization. But the same hatred forced a growth of technology, a sort of collective bootstrap-pull back, at a speed never before known. The first generation after the "war," if it had been a war at all, saw a death rate of one in five—a death rate

which remained constant for the next seventy-seven years. It also saw the beginnings of a leap forward into the modern age. The room, the food, were present; the motive, in the memories of those who had lived through the ravages of the disease, and in the sight of all Asians who saw their children die, one out of every five, was present to an even greater degree.

And the Asians worked. The second generation saw the development of missiles, and, previous to that, the reestablishment of communications throughout their world. (They did not communicate with non-Asians, not at first: their missiles were, they imagined, to do their communicating for them.) Near the end of this second generation, the uselessness of the missiles became obvious.

For two Orbital Stations waited above—Stations set there before the "war," Stations supplied with two hundred 100 megaton cobalt-cased bombs each. This was a known fact; it admitted of no argument, and of no reply.

At the third generation, communication was established with a mistrusting group of Negroes: the fierce nationalists first, all over the world, and, later, the others. The non-Asian world had very nearly destroyed Asia; it was clear that Africa, and Africans throughout the world, would be next. In fact, the procedure would be even simpler: once again, the concept of sickle-cell anemia, that disease specific to Negro ancestry, became a common one. The Asians had suffered under Compound Delta, as it had finally been called—not a virus but a set of mutually interacting viruses, able to grow and survive only in a medium which included the very specific molecular structures peculiar to the Asian heritance. The Negroes might suffer, the Asians said, darkly, under anything at all.

How much belief actually resulted from this move was a matter difficult, perhaps impossible, to assess. But the connection did not make that segment of the world's population which was neither Asian nor Negro anything but nervous.

. . . Particularly since Orbital Station Two was manned entirely by an African contingent, under an agreement made by the still-alive, and even sometimes active, United Nations (divested of half its members, and a good deal more than half its influence, but by no means dead yet).

This, in itself, did not outweigh the force of the first Orbital Station, with its complement of destruction (even though the second Station maintained an equal complement—and was probably, Angelo thought miserably, in better working order as well). What did make difficulties was the (third

generation) discovery of a really dependable anti-missile-missile.

Nothing could move horizontally through the Earth's atmosphere without calling forth immediate retaliation and immediate destruction of the moving object. Nothing. Rocketry became very nearly a dead issue. Of course, no anti-missile-missile system (and Angelo prayed hopelessly for better terminology, some day, when matters were just a little more peaceful) could hit an object coming straight down: the Stations maintained their force, and personnel could be shipped back to Earth.

Unfortunately, no personnel whatever could be shipped back up to the Station.

Nor could supplies.

Nor could anything else.

And so, as a result of eighty years of destruction and growth, there were now eight months of stasis for the crew of Orbital Station One (and for Two as well, Angelo imagined; he wondered idly how they were making out—but communication had apparently ceased over there). There seemed no answer to the situation. For all Angelo could think, he and his fellow crew members were going to be up there, circling the Earth dizzily and slowly, until all of them had long, white beards. Unless the order came through to fire the armaments—at Tokyo, Peking, Saigon, and all the rest of the Asian world. That, Angelo knew, would get him down to Earth again.

It seemed rather a drastic solution.

And, besides, he reminded himself, *all* the Station personnel wouldn't have long, white beards. There was always Juli.

Indeed, he told himself, coming out of the fog of reverie, indeed there was. And she lay within a very few feet of him. And the suppressants had been exhausted. And—

No, he told himself firmly.

Anyhow, not under two gravities.

V

NOT, it appeared, under any gravities—nor under none. Because, about thirty seconds later, the gravity snapped back to—well, perhaps a little more than one-tenth. But the lights, Angelo thanked his private gods, stayed on. Maybe it was a little less than one-tenth. Anyhow, it was something manageable.

And Angelo found out that he could move. Unfortunately,

Juli found out that she could move as well. Before Angelo had pried himself off the wall, Juli was on her feet, in a pose Angelo labeled for himself as the Frightened Gazelle, staring at him.

"Nothing," she said. "Don't try a thing. Not anything."

Angelo had the notion that he had heard those words before. Politely, he didn't mention the fact. Instead, he offered, "I'm just trying to help you back to—back to your quarters." And hoped it sounded convincing.

Somehow, he doubted that it did. Juli looked at him with an expression that was even more Frightened Gazelle than before. "I'm perfectly capable of making the trip by myself, thank you," she said crisply. "After all, Angelo—"

Somewhere in the back of his mind Angelo had been wondering, in a shrinking sort of way, *What next?* At that second, he found out.

Gravity remained constant at whatever inadequate strength it had reached. The lights in the corridor did not go off. Angelo's shoes seemed to have taken up permanent quarters away back near the bridge, where, God knew, he was perfectly willing to leave them. But there were a great many other things that could go wrong.

Magnetism, for instance.

For no apparent reason—whim, maybe, he thought—the corridor walls became suddenly and violently magnetic. With no pause whatever, Angelo found himself plastered against a wall, held there by the attraction of the wall for his metal fiber, fiber glass-coated suit. Juli, who was (to Angelo's great misfortune) nearer the opposite wall, went *spung* and stuck there, spread-eagled and facing him. She looked, he thought, absolutely beautiful; she was absolutely unreachable. Until the magnetism wore off . . .

"Angelo," she gasped, "what's—"

"Happened? We've been attracted."

She gasped again. "You mean, the suppressants—"

The woman had, clearly, exactly one thought on her mind—a fine situation for an ecologist responsible for life support aboard the station. On second thought, Angelo told himself, perhaps it wasn't a bad form of single-mindedness after all, if life support was what you were after. In order to continue the support of life, one had to—

He dropped the subject as if it had been a hot isotope. "No," he told Juli sadly. "I mean magnetism. The walls have decided to become magnetic. The metal in our suits . . ."

"Oh," she said. There was a brief silence. Both of them tried to move. Juli, Angelo thought, went through some

fascinating wriggles and heavings, but to no special effect except on his imagination. "Then if we took off our uniforms . . ." Juli said hesitantly.

Now there, Angelo told himself, was an idea in a million. An idea, in fact, in several million. "Then we wouldn't be stuck to the walls," he said. "We could go on back to our own quarters—to your own quarters. . . ."

"But—" She hesitated some more. "Angelo, do you think it's right? I mean—"

The answer was immediate. "There are times," Angelo said, feeling for about ninety seconds like an Authority on something or other, "when the principles of ethics have to give way to the immediate demands of a practical situation." Briefly, he wondered if that meant anything. It certainly didn't sound as if it did, but one could never tell, and Juli seemed to be convinced that it was a statement worthy of enshrinement among the National Archives, or possibly in *Playboy*, along with ministers, disturbers of the peace, and other national figures. And who, Angelo asked himself, was Angelo DiStefano, of Buffalo, New York, to argue?

"Well," Juli said slowly, "if you really think so. . . ."

Angelo put on his very best Sympathetic, Knowing voice. "Juli," he began, "I think that—"

And once again his thought was interrupted.

The walls (involved, clearly, in their own games) reversed polarity. Angelo found himself flying toward the opposite wall, where Juli had been spread-eagled.

Juli, unfortunately, passed him in mid-flight. They spun once round a common center and stuck to opposite walls again.

"This," Angelo said bitterly, "is ridiculous." Clearly, the Station was out to get him. There was, there could be, no other explanation.

The Station . . . or something on it.

And, once again, the walls reversed polarity. "Watch out!" Angelo said senselessly, and then nearly became senseless for real as the new impact hit him. As his eyes began to focus, he noticed that some odd convection current had reversed Juli in mid-flight. She was now hanging to the wall with her back to him, suspended from her most prominent features. Which, Angelo considered, must be reasonably uncomfortable, taking it all in all, and didn't he wish he could.

However.

The polarity reversed twice more, and then the walls got tired of the game and let them go. They fell simultaneously toward the center, and Angelo grabbed at Juli—purely, he

tried to convince himself, to prevent her from falling. He managed that much. Then there was a wriggling moment of balance-keeping, and Juli was gone down the corridor.

It wasn't until some time later, alone and sad in his own quarters, that Angelo noticed Juli's thanks for his last-minute rescue: lipstick on his cheek. But . . .

But Juli hadn't been wearing lipstick. She never did.

She must have made some, or procured some, on the Station.

Which led, when Angelo came to think of it, to a variety of interesting, and even promising, conclusions.

Perhaps, after all, there was to be some sort of counterbalance to all his bad luck, or whatever it was.

Perhaps there was (in the words of the once-powerful, the regretted, the unable-to-be-forgotten American Negro) a Good Time Coming.

Hope began to spring, if not eternal, at least for the moment, in Angelo's unspectacular (not like Juli's, by no means like Juli's) breast.

The feeling was pleasant, and extremely unusual. Angelo almost forgot about the Things that were, obviously, somewhere on the Station.

Almost. But not quite.

VI

WORK had to be done. Duty called. Duty, in fact, not only called but practically nagged, shouted, whined and otherwise made itself a nuisance. TIC, Target Identification Center, called and Angelo, like Chloe, had, eventually, to answer the summons. TIC was waiting. Angelo assured himself and, silently, TIC as well (not to mention Captain Zugzwang and the many, many officers and evaluation teams, personnel and psychological groups), that he was ready to soothe TIC. That his post was his own fifth choice out of the five on his own selection form didn't seem to matter any longer: the Needs of the Service controlled him.

And Angelo was ready to obey. Onward, then (he prodded himself, with a growing satisfaction in his own sense of duty), to the place where duty called.

Whether it made sense or not.

TIC room, he sang silently, *here I come.*

And, still barefoot, he began to pad out of his room and down a branching corridor. It reminded him, in a way, of the confusions of the New York City subway system, whose

constant description was given as SFUBAR: Situation Fouled Up Beyond All Recognition.

He considered, as he padded along, rechristening the station with the same name. It seemed, more and more, to fit.

However, was this his concern? No. His concern was Duty, stern daughter (and where had he come across *that* polemical description?) of the Voice of God. The stern daughter was occupied with TIC, and not with the New York City subway system.

The TIC room, when he finally reached it—without, for a wonder, any more serious mishap than a metal splinter, for which he could not account, in his left foot—required a personal coding system for opening, and a lockup arrangement after that. With accustomed boredom, Angelo went through the procedure, and watched the door slowly, slowly dilate.

It didn't dilate quite all the way, but he managed to pop himself through as if he were something wriggling through a tunnel or out of a womb. Then, once inside, he watched the door shut, and turned to get a sense of homecoming from the battery of instruments, dials and other impedimenta.

The vital matter at the moment was the target scope. Angelo slapped the personal ID panel, went to the scope and turned it on. A comparatively simple revision of normal radar (his instructors had told him) enabled him to trace the movements of large forces anywhere in the world; and a telltale circuit cut out anything that hadn't moved since the previous check. (If, Angelo brooded, it was working all right. But he supposed it was: after all, nobody, and no Thing, could get into the TIC room without Angelo's personal ID.) The machines hummed a little in a careless, cheerful sort of way, and then a slip of paper popped out of a nearby slot, as if the machines were sticking out at him their collective tongue. Ignoring this peculiarly horrid image, Angelo reached out and ripped off the paper.

There had been a sizable shift in the Asian Second Land Army.

This, Angelo knew, was not unexpected. With a solar eclipse due in five days, it was fairly clear that the Asians, if they were going to launch an attack at all, would launch it then. But the shift was a little ahead of estimated shedule. Perhaps the Asians were going to make their move *before* the eclipse.

And was there any way to tell? Not from the height of an Orbital Station, with communications not really working.

Angelo sighed. He told himself to keep a very close watch on the Asian movements—no more of this three-a-day jazz—and moved over to the showup panel which, on one more presentation of his personal ID, gave him the gift of a read-out on current target aiming for the missiles. The missiles couldn't be fired without a special entry code into the system from Earth, and without a final okay from Earth—both of which changed irregularly—but Angelo had to know when to ask for the code-and-okay. Responsibility, that was called, the stern aunt of the Voice of God, as far as Angelo could see.

The shift in position of a land army mass required a reset of the target data. Angelo took a rapid look at the current setup.

Then he took a longer look.

Targets: Japan, China, Paris, London, Washington, Lima, Vienna, Berlin . . .

The entire Earth.

Angelo slapped panel after panel. Nothing did any good. The targets remained, impossibly, exactly the same.

Obviously, the missile instructions were set up to eliminate, not the Asians, but the Earth. The entire Earth.

Angelo stared. Clearly, he thought with horror, there was a traitor aboard the station—a traitor to the entire Earth.

Maybe, he added, remembering the shoes, the traitor was from another planet.

Maybe there was an invisible alien on board.

Or a badly sewn monster.

Or . . .

Angelo went on staring at the unchangeable target showups, and wondering what to do next.

PART TWO

VII

NO matter how long he stared at them, the target scopes didn't change. They still showed the same reasonably total selection of targets: Rome, Washington, Milan, Paris, Leopoldville, Leningrad, London, Kyoto . . . Two hundred 100 megaton boms were waiting, with the entire Earth spread out invitingly below, for the enabling signal to come in from UN Technical HQ in Brasilia. Angelo felt a small mist of sweat cover his face and he sent up a tiny, silent prayer of thanks that, even if some UN idiot did decide, what with the movements of the Asian Second Land Army and the coming eclipse, to send up the coded and randomly changed enabling signal, the stuff wouldn't go off. After all, the missiles had to be separately aimed; they had to be coded to accept the targets on the scopes. And then they had to be primed, the circuits allowing the UN signal to get through had to be activated.

That, at least, Angelo told himself with a small sigh of relief, hadn't been done. At any rate, he hadn't done it.

But, then, he hadn't given the new target instructions either.

He stared blindly at the scopes, and then whirled to check the fire-control panel.

The panel lit when he slapped it. There was no need for Angelo to ask any questions, or to do any more immediate investigating. The facts were there, staring him in the face.

The circuits had been activated. The missiles were primed and aimed. True, they were still locked on safety position, but there was very little that Angelo, or anybody else, could do about that. They'd remain locked until the UN signal came through, coded, fed directly into the fire-control circuit of each individual missile. Any attempt to bypass the enabling signal, or to get through to the circuits which controlled it and which kept the safety lock on, would result in immediate destruction—but not of the Earth below.

Instead, the warheads of every missile would go off, all at once, right there in the Station. It might, Angelo thought, be uncomfortably warm aboard Orbital Station One if it ever happened.

And . . . he realized that he had no way whatever of telling whether or not it was going to. After all, *he* hadn't activated the primary circuits for the missiles; *he* hadn't changed the selection of targets. (There was even one missile aimed, according to the scopes, dead-on for Brasilia—which meant that if someone at the UN pushed the enabling button over there, it would be just about the last act of which he, or anyone else in the world's newest and strangest capital city, would be capable.) He, Angelo DiStefano, had done none of this.

Therefore, by a simple deduction, somebody else had.

Somebody . . . or something. Angelo remembered the shoes. What had been using the shoes? And who was there who wanted, not some portion of the Earth, but the entire Earth itself, destroyed?

Aliens were, as he knew to his entire boredom, part of the staple fare of 3D thrillers back home. It was true that nobody—anyhow, nobody trustworthy—had ever met one, and the last of the saucer flurries seemed to have died out about the time Compound Delta had come along to kill off half the human race. So, since there weren't even saucers to provide runabouts for these imaginary aliens, it was obviously . . .

Angelo, to his own discomfort and as an extra added value in his Intelligence work, had a fine, bouncing, active imagination. That imagination was now presenting him with a series of selected propositions. The propositions went across his head, just behind the eyes, from left to right, and they were written in letters of brilliant yellow flame. He stared at them as they traveled.

Proposition One: Nobody is ever crazy enough to get mad at the entire Earth. (This was a shaky proposition, but so were all of them; for the moment, at any rate, it looked just as horribly plausible as anything Angelo could think of.)

Proposition Two: Shoes don't walk by themselves. What was more, the Station's troubles seemed, in general, quite a bit above average.

Proposition Three: The last of the saucer crazes had occurred just about the time Compound Delta began its work.

Proposition Four: The Station's missiles were now aiming at the entire Earth.

Stir, Angelo told himself, *do not shake.* And when you have all four propositions nicely blended, what do you serve up in that handy little bowl known as the skull?

You serve up the clear and simple deduction that an alien race, who once flew around in saucers but who now had more sophisticated—in fact, entirely invisible—forms of transport, had tried once to destroy the human race, and had only managed half the job. The aliens, clearly, were now back, and they were going to finish the thing using the equipment of Orbital Station One.

All clear, all perfectly sensible. And for one long minute Angelo believed it as thoroughly as he had ever believed anything.

Then it began to dissolve. Perhaps, after all, there were other explanations. He started to wonder about those invisible alien ships which somehow were not detected by the anti-missile-missiles as they traveled back and forth. He started to wonder even more about the intelligence level of an invisible alien who borrowed people's shoes to walk in, and who set up the target scopes far in advance, so that Angelo would be sure to see them.

No, given everything, the—the causitive factor, Angelo told himself, was a lot more likely to be human.

Which meant, unless Angelo was really living in a 3D thriller and nothing was obliged to make sense any more, that the person responsible was one of exactly seven. Subtracting Angelo himself, which Angelo modestly felt he had a right to do, gave him a total of six.

Stowaways discounted, then—because how anything much larger than a filterable virus could stow away on a Station for as long as ten hours, let alone eight months, Angelo could not imagine—there was a spy on board, and that spy was one of the people Angelo had been living with for eight solid months.

Juli? Dr. Emmis? Captain Zugzwang? Shaw? Korkianovich? Woorden, the navigator?

Impossible. Every last one of them, impossible.

Which left . . .

Nothing. Nothing. Nothing at all.

All right, Angelo told himself angrily. *Let somebody else figure it out. I'm in no position to get any ideas. I'm all played out.* He went back to the fire-control panel and very carefully pressured out and removed a small interior circuit, keyed to his prints alone. With the circuit gone, the fire-control panel was useless no matter what happened, and no

matter what orders were given to the missiles. The orders simply wouldn't get through.

Angelo stuck the circuit into a tight-close pocket of his uniform, and left the TIC room. He had one job left to do; after that, he told himself, the whole situation could bloody well leave him alone.

He'd had, in fact, enough.

VIII

THE Communications Center was out near the edge of the inner sphere, and required a trip through several branching corridors which, Angelo was sure, he couldn't manage at all with the lights out. Under the minimal gravity, any talent he'd ever had for orientation was getting lost with great rapidity, and if he couldn't even tell whether or not he was right-side-up, the business of negotiating turns and picking correct branchings through pitch-dark corridors didn't sound anything like reasonable.

However, the corridors were still lit as he started out. Hoping that they would stay lit, that the gravity would refrain from throwing any more fits, Angelo went along near the right-hand wall, skimming a little and telling himself, without much irony, that he really preferred going barefoot, being able to float from place to place with the wall as a guideline. His magnetic shoes, he decided, could stay exactly where they were.

He was in a cheerful mood—cheerful enough to hum. Singing and whistling were under a general station ban because of the echoes set up by the metallic construction, but humming was allowed, and Angelo began to pick his way, harmlessly off-key, through the score of *Somebody Jones,* a musical which, if it was still running, was setting worldwide records for longevity.

He had hummed his way through the title song and two other numbers, and he'd made about half the distance to the Comm Center, when he saw two men turn a corner and head down the corridor toward him. Both of them were walking without difficulty, which was, in one case, a distinct surprise.

No one would ever be surprised that Dr. Victor Emmis was walking steadily—nor, indeed, that he was doing anything else in the same fashion. His stern, jowly face was held rigid above an unbending body, and, in the Station suit, he looked like an advertisement poster; Angelo, next to him,

had always felt like the Before half, the ninety-eight pound weakling. As they passed, Dr. Emmis (to Angelo's knowledge, nobody on the station called him Victor, let alone the unthinkable Vic) nodded in a distant, friendly fashion. "On the way to the bridge," he said. "You wouldn't have any notion what about, would you, DiStefano?" The tone was no more than mildly curious; whatever it was about, Emmis' voice said, he'd find out soon enough, and whatever it turned out to be he'd be perfectly capable of taking care of it.

"Nope," Angelo said, thinking of the plate of snakes. . . . After all, he didn't know for certain that snakes were the agenda for Dr. Emmis, and anyhow, it was probably better to let him find out for himself.

Perhaps, even, Korky had told him. For, walking with a steadiness that was, in Angelo's experience, almost unique, the mournful, dark-eyed cook and general-repairs officer accompanied the dapper doctor. Korkianovich was, as far as Angelo could tell, stone cold sober. A Station first, he told himself, and greeted the mournful man with a bright and cheery smile.

"Too much going wrong," Korky said darkly. "Station falls to bits—why ask me to fix? Running out of parts, running out of everything." He flung his arms up, displaying the hairy backs of his hands, and went on past Angelo, walking about one good step behind Dr. Emmis and looking, Angelo thought, as if Dr. Emmis were the prison chaplain and Korky were the innocently-convicted murderer in an ancient 2D thriller, walking the last mile.

And walking it, in the name of God, cold sober! Angelo shook his head in amazement, and went on.

The Comm Center door was slightly open, which wasn't really unusual. Chris Shaw kept saying that he wanted a little fresh air, and the joke, which hadn't been highly appreciated the first time he'd used it, had become staler and staler with the succeeding months. It was, in a way, a tribute to Shaw that no one ever tried to stop him from talking: everyone, Angelo thought, apparently felt just the way he did himself—that if Shaw got so much pleasure out of an old gag, it'd be a shame to take it away from him.

With a slap at a side panel, Angelo dilated the door the rest of the way open and went through. The room stared at him, and went on staring.

Angelo had never really been comfortable in the Comm Center. The many little screens dangling out into mid-air at

the ends of their little cables looked like a flock of small, curious dinosaurs, and the various oscilloscope panels, yes-no danger lighting, and override switches helped to clutter the place with flickering lights, staring video eyes, and, hanging above the override switch panel, one magnificent sign, placed there long before the beginning of Angelo's tenure, perhaps before Compound Delta itself, when the station had first gone up. The sign, by order of some paper-pushing joker who (Angelo imagined) could never leave solid ground without paying an extra weight assessment for the lead between his ears, read:

DANGER: HIGH VOLTAGE

Angelo was reasonably sure that not only Chris Shaw, but everyone on the station, knew that the enormous override switches in Comm Center were not registered in millivolts. But, then, the sign didn't do any harm, and Chris didn't seem to mind it. Chris Shaw, in fact, didn't seem to mind anything—except whatever he was supposed to be doing at the moment.

And what he was supposed to be doing . . .

Chris wasn't seated behind the desk. He wasn't standing near the walls. He wasn't readjusting the angle of one of his tiny dinosaurs. In fact, at first long glance, he wasn't anywhere at all.

Which was impossible. Just as Captain Zugzwang never left the bridge, ate and slept there and, for all practical purposes, had no idea that the rest of the Station existed, so Chris, jealous of his many, many little pieces of machinery, never left Comm Center. Angelo wondered whether Chris would become homesick for the place once he was back on Earth—if they ever got there. It was, he realized with sad familiarity, perfectly possible.

On the other hand, Comm Center certainly seemed to be deserted. Angelo looked from one side of the room to the other, and then up at the ceiling, and then down at the . . .

At the two tiny legs which stuck out from under the desk. The legs were very still. Angelo couldn't hear anybody breathing, not over the clucking, guzzling and occasional whining of the equipment. And if there was a spy on the station, trying to cancel out the Earth, one of the very first things he might do would be cancel out the Communications officer. It was obvious, Angelo told himself; and with great timidity, and an absolute certainty that he would not get an answer, he called out: "Chris? Chris?"

From a hole in the very center of the desk, a small head popped up as the legs retreated. The head, complete with tiny beard, looked entirely isolated from anything else—a head sitting on the giant platter of the wide dull-finish desk. Angelo blinked and began to feel like Salome, receiving the wrong head for a birthday present, or whatever it had been. This head wore trailing earphones and a pair of pince-nez, which sat oddly on the small round ball, and Angelo was reasonably certain that John the Baptist had not worn pince-nez or earphones. On the other hand . . .

This speculation began to carry him to dizzying extremes, and he was grateful when the head opened its small mouth and said, in the sweet, high-pitched voice that masked Chris Shaw's absolute indifference to anything that didn't come with a circuit diagram: "What is it now, Angelo?"

"I thought you were—" Angelo stopped. His own bizarre fantasies did not need to be inflicted on a waiting world, he told himself sternly. And Chris was very clearly neither dead nor John the Baptist.

"I was trying to find a resistor," Chris said. "The thing must've rolled under here, dropped out of my hand while I was putting in some replacements—about the last ones we have, and this is no time to lose one. Look, Angelo, can you go under and check the far corner of the desk for me? There's a shadow spot there, no light at all, and you have to be right up against it to see anything. Sure as you're born, that's where the thing went, where I can't see it." His voice was full of puzzled affection, as if he couldn't understand why this lovely little resistor was hiding itself from him, from Chris Shaw, who only wanted to take care of it. As Angelo knew, the image was exact and accurate.

He looked at the desk, which did not offer much crawl space—not for anybody over Chris Shaw's three and a half feet, with girth to match. "I don't think I can make it," he said. "But if you use a flash—"

"Ha," Chris said. "You know what, Angelo? I'm stupid. Just plain stupid." He popped out of the desk-hole as if he were getting born all over again, complete with the Station suit on, not to mention beard, pince-nez and earphones, and scrabbled around on the desktop litter, finding a flash at last and disappearing. Angelo waited patiently while Chris went seeking his love, and listened to the gasps and all the rest. At last, triumphant, the midget popped up again and swung himself through the hole to sit cross-legged on the desktop surrounded by litter. "Found it," he said happily. "Just where I thought it would be." He opened one hand and displayed

a small, sparkling something-or-other. Angelo supposed it was a resistor. Chris Shaw dropped the flash casually, put the resistor down with great and affectionate care, and asked, "Angelo, what did you come in here for?"

"I need a communication channel with UN HQ," Angelo said, and nothing more. If there was a spy on the Station, it might be anyone—and who better, when he came to think of it, than Chris Shaw, who didn't really care for human beings? As long as Chris was surrounded by his gadgets and his dinosaurs, the rest of the human race could go to Baffinland in a wheelbarrow. Angelo knew, to some extent, how Chris felt: after all, Chris was the only person on board shorter than Angelo was. And no matter how successful you were, being a midget was something you just didn't get over.

Nevertheless, Chris was about as likely a candidate for the spy, or saboteur, as anybody else (which told Angelo once again how absolutely ridiculous the whole notion of a saboteur was; he only wished he could convince the target scopes of that). "I can't give you a channel," the saboteur said, and Angelo blinked and readjusted his mind again.

"You've got to," he said. "This is Priority One." And that, he told himself firmly, was all the information he was going to give out. There was one obvious step to be taken, and he was going to take it—but there was no reason to spread the news anywhere outside the skull of Angelo DiStefano, Intelligence officer.

"Priority One, Angelo," Chris said, beginning to get angry. It didn't show in his voice—it never did—but his translucent, perfect skin began to flush a dull dark red. "You can't have it. Let me explain a few simple little things to you."

"I don't want any explanations," Angelo said. "I want a—"

"You want something you can't have," Chris said protectively. "Look, Angelo, there's interference on every possible channel, and there's going to be for a while yet. There's that eclipse coming"—he didn't sound or look irritated about the eclipse: that, too, he probably imagined, was subject to explicable, beautifully balanced natural laws, not like messy and unpredictable human beings—"and the sunspot activity has fouled up everything. The power I'd need to establish a channel with UN HQ would burn out a piece of my board, and I can't have that. I simply can't have it."

Angelo sighed. The world was against him; there was a saboteur on the station, and now he had to argue with his

own Communications officer. "I'm afraid you're going to have to put up with it," he said, and then, just a little more softly, added, "and, by the way, I want a visual circuit."

"A visual circuit?" Chris asked in complete disbelief. "When I can't even get a voice circuit without blowing out part of the board? Angelo, you're crazy. You've gone mad. I can't do any such thing—"

"But you can," Angelo said, "and you're going to."

Chris wrung his hands, a motion Angelo couldn't remember ever having seen before. It reminded him, in a dim, unpleasant way, of Captain Zugzwang's particolored snakes. "Angelo—Angelo, listen to me," Chris said. "We only have so many replacements—resistors, capacitators—it's easy to run vacuum circuits up here because vcauum is what we have most of in the outer shell, but the solar emissions, the cosmics, everything out here breaks down half our equipment day after day. Angelo, we need replacements all the time—you know that—and we're running out. We've been up here a long time, Angelo, and we're running out."

The tragic tones of Chris's voice seemed to fill the room, and Angelo steeled himself. "This is Priority One," he said flatly. "I've got to have that circuit, and I've got to have it visual. No matter what."

"But . . ." Chris, in agony, hesitated for a second. "But Angelo, if enough stuff goes—and it's possible, believe me, it's very possible—we won't have communications left at all. We'll be up here without any line back. You can't ask for something like that!"

"I'm asking for it," Angelo said.

There was a little silence.

"I'll check with the Captain," Chris said in a tone that still retained a little hope. He picked up the resistor, apparently without noticing that he was doing so, and warmed it in his hands. "If the Captain okays it—"

"Captain Zugzwang," Angelo said, perfectly evenly, "has nothing to do with this. The decision is mine, as Intelligence officer, and I've made it. I'm not making a request, Chris; I'm giving an order."

This time the silence was quite a lot longer. Chris, very slowly, opened his hands and let the resistor roll gently to the desktop. He stared down at it as if it were the dead body of his very best friend.

"I'll see what I can do," he said dully. "Come back in half an hour."

"Right," Angelo said, and added, compulsively, "Chris—I'm sorry."

Chris Shaw shook his little round head, staring down at the resistor. "I know," he said. "I know. I guess—I guess it just has to be that way."

Silently, respectfully, Angelo left him. Neither gravity nor lights had changed. He had a long walk back to TIC, but with any luck at all, he told himself, he'd make it before something else went wrong.

He didn't believe that for a second. So many things had gone wrong already . . . and now he'd had to force Chris Shaw to commit what Chris undoubtedly thought of as murder. In a good cause, but that wouldn't matter to Chris, even if Angelo had felt able to tell him. He thought back, and realized that Chris hadn't been quite so protective about his equipment during the first part of their Station tour; then, with understanding and acceptance, he realized why: the sex-suppressants had given out. For everyone else on the station, Juli might be the target (except for Juli, of course); for Chris . . . well . . .

Angelo thought of the defenseless little resistor and sighed heavily. There were always innocent casualties. . . .

IX

NATURALLY enough, halfway back Angelo met the same people he'd met halfway there. He'd passed two mechanicals scurrying along with their platform-wheeled feet, on goggle-eyed errands only Korky, as maintenance officer, would probably know much about, but the mechanicals didn't count: they were always around somewhere. Lately, Angelo told himself with some discomfort, they'd been lurching some, not quite going straight, but the two he saw were doing fine, walking, or rolling, or whatever the word was for that odd combination of motions that was the locomotion of a mechanical in one-tenth-or-so gravity, as straight as they'd ever been. Maybe, he thought hopefully, maybe things were looking up. Maybe . . .

Angelo's mind, a well-stocked library of irrelevance, tossed up a joke that was, at a minimum, one hundred and twenty years old. "How's business?" one man was asking another, in the depths of a depression.

"It's looking up," the second man replied, and the first stared with surprise.

"Looking up?" he repeated with awe.

"Sure," the second man said. "How else can it look? It's flat on its back."

Telling himself, without much success, not to be such a pessimist, Angelo attempted to wipe the joke out of his mind. As he was doing so, Dr. Emmis and Korkianovich turned a corner and came into view, returning from their little meeting with Captain Zugzwang.

Korky looked grim and silent. Clearly, Captain Zugzwang had hurt his feelings, which, since Korky had been sober, and apparently still was, must have been in a peculiarly unprotected state. He stalked on by without a greeting, and was followed, a second or so later, by a mechanical, zipping along as if its unthinking life depended on speed. As Dr. Emmis stopped and also looked back, the mechanical stopped before a wall plate that looked like any other plate, and slid inside. Korky, some distance down the corridor, heard the sliding sound and stopped. The mechanical ducked through its homemade door, came back in less than a second, and zipped onward to join Korky, holding a bottle of what was, obviously, some sort of alcoholic refreshment in one crescent-wrench hand. It had neatly shut its door before going on, and Angelo, staring at the space, could see no sign that a door had ever been there. In some ways, he began to think, the mechanicals were just as efficient as ever, or even more so.

Korky accepted the bottle, and the mechanical, bent apparently on some other duties somewhere in the inner or outer shells, turned on an oversized dime and came back, neatly avoiding the wonderstruck Angelo and Dr. Emmis. With a tiny *whir*, it went around a corner and was gone.

"You know—" Dr. Emmis began, but Angelo interrupted him.

"Doctor," he said, "what *is* it? Have you found out?" Unnecessarily, he pointed at the plate Dr. Emmis was carrying, the same plate of snakes which Angelo himself had been staring at, what seemed like about six weeks before.

Dr. Emmis, balancing the plate neatly, actually managed a small shrug. "I haven't the faintest idea," he said. "I don't know, and I don't want to know. But the Captain wants it analyzed. Apparently a mechanical served it up to him for lunch, and I'm perfectly willing to agree that, whatever it is, it isn't lunch."

"Analyzed?" Angelo said. "Why bother with something like that?"

"Because," Dr. Emmis said slowly, "the Captain isn't at all sure whether or not the mechanicals are trying to poison him." His eyebrows lifted, great doubting tufts on his long face.

Angelo swallowed. "The mechanicals—trying to poison him?" He thought the idea over. Given Captain Zugzwang, his passion for order, his training films, and all the rest, the notion had a certain obvious charm. However . . . "They couldn't," he said flatly. "They haven't got the brains."

"A position," Dr. Emmis said thoughtfully. "Distinctly a position. However, our Captain, logical though he is when at his best, seemed deeply affected by this latest sample of Korkianovich's culinary art." Angelo's admiration for the doctor had never before reached such heights; he knew perfectly well that he would require three hours' practice before a mirror to be able to say *Korkianovich's culinary art,* and here was Dr. Emmis rattling it off as if it were nothing.

And it certainly wasn't nothing, he thought confusedly. It was still, coagulated, snakelike, and colored variously in pink, white and a bright, bitter-looking, metallic blue. It was awful. "So he asked you to analyze it?" he said.

Dr. Emmis nodded. "As a matter of fact," he said, "Captain Zugzwang began in the most logical manner. Rather than ask me what was in the—the selected lunch, he asked Korkianovich."

"And?" Angelo said, as Dr. Emmis sighed gently, remembering.

"He said it was reconstituted," the doctor replied at last. "When the Captain asked him: 'Reconstituted what?' Korkianovich said only that it had been reconstituted according to regulations. The Captain disagreed with this," he went on gently. "So, to be perfectly frank, do I. Nothing in the regulations accounts for metallic blue as a food coloring. It does not occur in nature in edible form. Naturally, therefore"—and the doctor permitted himself a small smile at his pun—"naturally, we are not conditioned to accept anything with that coloration as being edible. To be frank—"

"You explained all this to Captain Zugzwang?" Angelo said. He tried to imagine the Captain sitting still for a lecture on food conditioning, and failed.

"Not—ah, not exactly," Dr. Emmis said. "There was hardly time. After Captain Zugzwang had ordered Korkianovich off the Station—a rash utterance, and one which he rescinded as soon as his normal color and blood pressure began to return—he ordered me to take the plate and analyze it. I am, therefore," he finished, wrapping the story neatly in the most respectable of phrases, the most balanced of judgments, "doing so; or, at least, I shall begin when I have transported the plate back to my offices. There was some talk of ordering a mechanical to carry the plate back

to my office, a procedure which I would much have preferred, but Captain Zugzwang seemed to fear the idea. His thought was that, since the mechanicals had brought the —the *stuff* in in the first place, he would not trust a mechanical to bring it out again and deliver it to me without changing its content in some way. I tried to tell him that his fear was groundless—"

"Sure," Angelo put in. "What I said: they don't have any brains."

"Exactly," Dr. Emmis said. "But he would not agree. I am therefore forced to do my own transporting of this peculiar farrago of chemicals. Why, I have not even the aid that our friend Korkianovich has: mechanicals programmed, apparently, to bring him his daily ration of Lethe."

Angelo thought of the scurrying mechanical with its bottle of some sort of liquor. "You know," he said slowly, "that's beginning to bother me. After all, where would Korky get liquor? There's none of it on the Station, never was. It's not in the supply list, and—"

"Yes," Dr. Emmis said quietly. "When one comes to think of it . . . To be frank, DiStefano, I'm a bit curious myself. I assume that he has somehow managed to set up a still somewhere on the Station, but why it hasn't been discovered, and how he has managed to keep it going, not to mention the materials problem involved, are pretty questions. Questions, DiStefano, which really don't seem to have any answer. You see, during the first part of our somewhat lengthy stay here, I . . ."

Dr. Emmis' voice trailed away, rising in pitch as it did so. The lights blinked, went off, came on again, performed some unknown set of code blinks, and shone down once more on a brand-new world.

The gravity was up at double Earth normal again. Angelo, trying to fall as gently as possible, landed somewhat on his back, his head propped up against a wall just enough so that he could see Dr. Emmis. In a way, he wished he wasn't able to see at all—not if Dr. Emmis was what he had to look at.

At the moment of changeover, Dr. Emmis had apparently tried to fling the plate of snakes away from him. He hadn't had quite enough time. The plate itself had landed, as Dr. Emmis began to fall, on the crown of his own head, not heavily enough to knock him out, but quite heavily enough to shatter the hard plastic material. Dr. Emmis' face was barely visible. It was covered with goo, lumps of

something-or-other (possibly, Angelo theorized, lumps of plastic plate) and snakes.

The sight was not a pleasant one. Trying to distract himself from it, Angelo rolled his eyes upward, checking on the lighting system. The lights were now unchanged and looking perfectly innocent. Somewhere, a high-pitched, remarkably unpleasant whining sound had begun; a generator or some other gadget was in the process of failing, Angelo thought. The whining kept him from hearing the heavy metal *clank clank clank* until the terrifying sight was upon him.

His shoes, as calmly as if they had someone in them, were walking down the ceiling of the corridor.

Angelo felt a vague stirring of early religious training, and an even vaguer impulse to put the Evil Eye on the things. But, then, they undoubtedly had, if not an Evil Eye, an Evil Foot of their own.

And they were walking toward the air lock at the corridor's branch, the air lock that led out into the vacuum of the outer shell. This fact penetrated Angelo's gravity-loaded mind rather slowly, but when it did he realized that there was only one thing for him to do.

Nothing.

Let them go, let them go, God bless them, he sang to himself softly. He watched the air lock swing open and the shoes walk calmly out. The air lock was supposed to open automatically if anybody stepped into the proper position, but Angelo wondered, just a bit, if the shoes hadn't somehow managed to open the thing manually, with invisible hands. Or tentacles. Or . . . The lock shut. *Farewell, sweet shoes,* Angelo thought; *flight of angels bear thee to thy rest.* Only he doubted that the flights would be angelic.

Anyhow, the shoes were gone. And Dr. Emmis, who apparently hadn't seen them, had to be informed.

A glance, and a brief memory of what his ears had been hearing, convinced Angelo that this was not the time to inform Dr. Emmis of anything whatever.

Dr. Emmis was covered with snakes, and he was not happy about the fact. Some of the stuff appeared to have got into his mouth, and he was muttering grimly something about machine oil—which seemed, even to Angelo, an odd flavoring. A second or so later, he began to wonder whether he had stumbled on the real explanation of the strange lunch: was it, after all, mechanicals' food? Mechanicals did not, in his experience, eat, but snakes flavored with machine oil, colored, in spots, a bright metallic blue, seemed some-

how the perfect gourmet dish for a shining young mechanical home after a hard day's work.

Under two gravities, even the simple processs of trying to get the snakes out of hair and face was too much effort for the large doctor. He was heaving slightly in an attempt to get his hands up to the scene of carnage, but without much success. In an effort, then, to take the doctor's mind off his predicament, if that's what it was, Angelo said:

"What was that you were telling me about Korky's drinking?"

"Umf," Dr. Emmis said, and managed to spit out a bit of pink snake. "Urg. Gah. I do not consider this a proper analysis. Gah."

"Yes," Angelo persisted, "but—"

"Drinking?" The doctor's mouth seemed clear. Even under two gravities, his voice remained even and strong—quite unlike Angelo's gaspings. "I knew about it from the start. I was, you might have said, in on the initial stages." Angelo promised himself that he would never have said any such thing. "You see, DiStefano, Korkianovich began by requisitioning alcohol from the medical stores, with the pretext that he needed it to clean the mechanicals—part of his maintenance chores, I would imagine. And the pretext was not so flimsy that he could not keep me blinded by it for some weeks."

Angelo spent a bit of time disentangling that last sentence, and finally thought he had it by the tail, at least. "You mean—well, after he couldn't fool you any more, what did you do?"

Dr. Emmis cleared his throat—perhaps merely for effect, and perhaps to get rid of the very last of the snake. Angelo didn't think it wise to ask which, but remained quiet, patient, waiting . . . and crushed under the double gravity.

"I informed Korkianovich that I was substituting wood alcohol for the grain alcohol in the medical stores," the doctor said, "and treated him to a lengthy, and quite accurate lecture on the effects of wood alcohol on the human system. With luck, you must know, one does not die: one merely goes blind, or possibly mad."

"Oh," Angelo said. "And after you'd fooled him—"

"I had not," Dr. Emmis said indignantly. "I got rid of the grain alcohol through a convenient air lock and substituted for it wood alcohol which had been sent up as part of stores. I don't know why we were supplied with both sorts, but it is, thank the Lord, not my duty to fathom the military

mind. I have quite enough trouble attempting to obey its more incompetent orders."

"And the wood alcohol—"

"Was not touched," the doctor went on. "Korkianovich is getting his private Lethe from someplace else, in some other way—and, now that one comes to think of it, it would be interesting to discover just how he has managed to bend regulations this time."

One had not come to think of it, Angelo told himself; two had. Three, he supposed, if you included Korky himself, who must have done quite a lot of thinking before he came up with the notion of . . . well, whatever it was. The mechanical with its own private doorway, the neat bottle containing whatever liquor-substitute Korky had managed to rig . . . this set of pictures would not leave Angelo. And there was a connection. Long, long before—six or seven years before, he thought—he'd been floating in an unknown position in a dark corridor and he'd seen an unidentified door open. Whose door? One of the crew's? Or did that, too, belong to the mechanicals, and to Korky's private pipeline?

And what difference did any of the questions make? Angelo chid himself for haring off after minor matters when there was a saboteur (or something—or, in fact, some Thing) loose aboard the Station. "Doctor," he began, "I wonder if you'd tell me—"

"What?" Dr. Emmis asked, after some silence.

Angelo said, with perfect truth, "I don't know." There had to be a question or two to ask, but under the gravity he couldn't think of any and, besides, even if he did, what guarantee did he have that the doctor himself, quiet, self-possessd, always in total control, was not the saboteur in question?

The gravity began to lessen—very, very slowly this time. With obvious relief, Dr. Emmis struggled to sit upright, and used trembling hands to wipe off the worst of the mess with which he was covered. Angelo lay where he was, feeling that he deserved a little rest. Altogether too much had been happening, and he had the strong feeling that he was nowhere near the end of events. There was more to come, and he needed rest to deal with whatever it was going to be. He had no idea what it might turn out to be, except for one notion which he held as an absolute faith.

Whatever it was, it was going to be terrible.

Under a gravity and a half (more or less, Angelo estimated), Dr. Emmis managed to rise and stalk heavily, wobbling only a little, down the corridor to his offices, giving Angelo a curt goodbye and leaving him—as everyone seemed

to do—quite alone. Angelo didn't mind: in a way, the life of a hermit was a relief. At least there were no more problems.

It was then that the parade began.

Angelo knew perfectly well that the various plants and airgrowths aboard had to be moved from spot to spot around the Station to prevent any concentration of stray radiation which might—which probably would, according to Juli, the Station ecologist—lead to a high mutational incidence. But this fact was not the foremost one in his mind. He even knew that mechanicals did the moving, but, from his semiprone position, he couldn't see the mechanicals at all.

He could only see the shrubs, the trees, the plants and other growths parading by him. It seemed the final blow, somehow—one last step toward entire insanity. Endlessly, the plants and trees continued their parade, and, at last, Angelo raised one heavy arm and waved at them, feeling as if he had at last, to his great relief, entered unrecalled the provinces of delirium.

"Welcome," he said, "to Dunsinane."

X

DELIRIUM, unfortunately, didn't last very long.

The trees went on by, and Angelo's mind, circling about their fantastic voyage, went from trees to forests, forests to parks, and from parks to the idea of Earth itself. And that idea led him, with natural grace, to a wobbly walk in the direction of the Navigation Room, where John Woorden held bitter sway.

After all, before he set up a contact with, and through, the UN, he might make a check of one horrible, and very unlikely, idea. The target scopes might not be sabotaged at all; they might simply, he told himself, be out of alignment, due to some unexplained, unknown and unexpected orbital shift by the Station itself. Angelo knew nothing about such a shift, but Woorden would. The man hadn't done a lick of work, as far as Angelo was aware, since piloting them up to the Station eight months ago, and the least he could have been busying himself with was a continuing plot on present position. For one thing, when—and if—the crew finally did leave Orbital Station One, it would be handy for the navigator to have some idea of where the Earth was.

And, though his stride remained wobbly and he kept a

lookout for novel events, Angelo made it to the navigator's purlieu without any mishap at all, surprisingly. He'd met a mechanical or two on the way—and these had been, as usual during the last few weeks, lurching along with an entire disregard for such effete notions as centers of gravity—but the mechanicals hadn't bothered him, and he certainly hadn't gone out of his way to strike up whatever passed for conversation with beings who had neither brains nor vocal cords. Gravity remained about one and a half, lighting remained constant, and, in general, Angelo had a peaceful, if somewhat wearing, journey. He didn't entirely believe his luck, having once known a fine girl who had sketched his entire life for him in a single statement about her own: "If it weren't for bad luck, I wouldn't have any luck at all." But there he was, without damage and without further confusion, standing before the door of the Navigation Room.

In heavy gravity, it is not terribly easy to knock on a door. Lifting a hand and letting it fall against a knock panel is not very difficult, but, once you are off balance in that manner, bringing the hand back to knock again is a job calling for both nice adjustment and brute strength. Angelo, however, knew that knocking was a necessity—John Woorden was, he told himself sadly, like that.

He knocked, brought his hand back, and knocked again. Unfortunately, he miscalculated a bit, so that when the door dilated Woorden peered out to see Angelo sprawled against the wall about an inch and a half away, his nose pressed firmly into the knock panel, and his eyes shut with mute suffering.

"Got see you," Angelo managed to say to the knock panel. Woorden grunted.

"That is not the manner to announce entrance," Woorden said coldly. Angelo made a sound or so to the knock panel and tried once more to bring himself upright, using his nose as the only available pressure-point. Woorden, without moving, looked on as Angelo swayed to an erect position, his nose feeling as if it had been stamped straight into his face by a die press. At last Angelo uncrossed his eyes, rubbed his nose and turned to look at Woorden, who said; "Better. Much better."

"Glad you're pleased," Angelo said. The navigator was a stickler for protocol, even under the silliest of circumstances —defined, by Angelo at any rate, as those circumstances in which you are one of seven people on an Orbital Station. "Woorden—"

"Lieutenant Commander Woorden, if you please," the

Navigator said coldly. "And I see no need for humor at my expense." Woorden, who created no humor, had somehow managed to obtain a rudimentary ability to recognize it. When this ability came into play, he didn't like what he recognized. And was this the time to antagonize the navigator? No, no, Angelo told himself, a thousand times no. Instead, he had to dig out some information.

"Lieutenant Commander," Angelo began, feeling very silly indeed, "I've got to ask you whether the Station has changed its orbit." Woorden's eyes widened, and he took one long hissing breath.

"Why should it?" he asked defensively, and Angelo saw a tiny spark of what seemed to be panic work its way into view from behind Woorden's ice blue Boer eyes.

"Uh—I've got to make the check," Angelo said. "If you'll let me in to check out the Nav scopes—"

"If I'll what?" Woorden asked him angrily. "Mr. DiStefano—" Even Captain Zugzwang generally didn't go so far as calling Angelo "Mister," and Angelo was reasonably sure that he didn't like the attitude, but after eight months he was, he supposed, beginning to get used to it; you could get used to anything, he told himself, even sabotage. Even the constant pressure of knowing that something, somewhere, was terribly wrong, and getting worse by the minute . . . anyhow, either you got used to it, Angelo figured, or you went batty, and he had no real desire to turn in his ID card at a neighborhood funny farm. "Mr. DiStefano, I cannot allow you inside the Navigation Room." And Woorden stood braced, standing a full foot taller than Angelo and perhaps more than a foot broader, blocking the dilated door.

"But I've got to—" Angelo began. It was not, clearly, his day for finishing sentences. Woorden broke in again, as sharply as before.

"It is against regulations for any member of the weapons team to acquire the knowledge of any other member," he said. "The reasons for this are, I am sure, clear to you, Mr. DiStefano. If any one man would manage to acquire all skills, Mr. DiStefano, he would then be able to fire the missiles, without aid from any others. Given, of course, that the UN acquiesced in their use: I am to understand that this is necessary for any firing whatever."

"Well," Angelo said, "yes and no. If you want to fire on an exterior target, yes. On the other hand, if all you want to do is blow up the Station and kill every person aboard, including yourself, you don't need permission at all. What you do need—in addition to psychiatric help back at Ameri-

can Memorial—I wouldn't venture to guess." He smiled at the navigator, having done, he realized one second later, just about everything wrong he could possibly have managed.

"You denigrate our hospitals?" Woorden asked. "In South Africa we have built the finest hospitals, and still they stand, available to all—within certain limits. In South Africa—ah, there, on the veldt, where the okapi run—we have already the best of civilized amenities. I myself am a graduate of the University of South Africa, as you must know, Mr. DiStefano, and I take a—a back seat, I think you say?—to no one at all."

"If *denigrate* means what I think it does," Angelo said, "I didn't do any such thing. I'm sure your hospitals are just great. And your okapi, too. Not to mention the University."

Woorden only shook his head slowly, massively, as he looked down at this barbarian from a country where (before Compound Delta, before the realignment which had centered the Negro almost entirely in the African states to the north of his own beleaguered country) some attempt had actually been made to raise the Negro to the high estate of the natural rulers, the people like Woorden himself, the proud human beings with minimal melanin. "And your humor," he said sadly. "I am to assume that your reference to the blowing up of the Station was meant to be humor? For it could hardly, you must understand, be serious."

"I hope not," Angelo said, watching for the flickering panic once again, but not really finding it. Not that its absence proved anything: the navigator was remarkably good at concealing his emotions, if any. "But, anyhow, I see the point. If you won't let me in—"

"It is not a question of my will, Mr. DiStefano," Woorden assured him with a gray, sad satisfaction. "It is a question of the regulations. Surely you must see that?"

"Whatever," Angelo said. "If I can't check the scopes, I've got to ask you to do it. To tell me if there's been any change whatever in the orbit. By the same regulations," he went on, happy to be able to turn the weapon even where it was completely unimportant, "I can't tell you why I have to know. But I do have to know."

Woorden nodded gravely. "Very well, Mr. DiStefano," he said. "As an official report, you may take it from me that there has been no orbital change whatever."

"You're sure?" Angelo said, without thinking.

Woorden looked offended. "I should not say so," he re-

plied, "if there were the slightest doubt." The door began to dilate shut.

Angelo thought of another question or two, but let them go; they weren't important and there was no sense whatever in continuing to disturb Woorden—Woorden the stickler for protocol, Woorden the beleaguered South African, Woorden (to everyone's surprise) the deeply and vocally religious man. Angelo was, he supposed, religious enough himself, but he didn't make the sort of enormous public affair out of belief that Woorden seemed to find necessary to his own. Sometimes, Angelo told himself, the navigator puzzled him.

Sometimes, in fact, everyone aboard did. After all, as far as he could see, someone aboard was a saboteur—and after eight months of close-quarters living, Angelo hadn't the faintest idea who that someone could be. Dr. Emmis was unthinkable: a staid, dignified man who would as soon dirty his hands with sabotage as, Angelo thought, eat the Captain's odd machine-oil lunch. (But, then, Dr. Emmis *had* eaten a snake or so, hadn't he, when the gravity had switched back to double normal? And where did that leave anything?) Juli was flatly impossible. Angelo, admitting that his own notions were slightly colored by the fact that Juli was not only female, but also Juli, could not see her trying to destroy the Earth: her business, after all, was life-support, not total destruction. Korkianovich was a happy cook-and-maintenance type, mostly, Angelo told himself, too drunk even to see meters, let alone change them around. Wasn't the current condition of the Station enough to absolve Korky of having any mechanical abilities whatever? Captain Zugzwang was a fanatic for order and propriety: if a training film required the destruction of Earth in order to be shown at the regular time, the Captain, Angelo thought, was perfectly capable of doing the destruction. But he couldn't quite come up with any such film, and he couldn't come up with any way in which the Captain could have made himself believe that the Earth's cancellation was conceivable. Besides, the Captain never, never left the bridge—how could he have switched the TIC scopes? Or activated the missiles? The mechanicals had strict bars against doing anything of the kind except under a very carefully defined Emergency Status situation—one which the Captain was powerless to set up as long as the mechanicals sensed a single other person alive on the Station. And they were certainly doing that—bringing liquor to Korky, if nothing else. What was more, you didn't argue a mechanical out of its orders: me-

chanicals, as Angelo remembered pointing out, didn't have brains.

And that left Chris Shaw, who never left the Comm Center, and Woorden, whose religion would have forbidden him, as far as Angelo understood the notion in the Boer's head, to destroy the human race.

Six people . . . one of them a saboteur. And he'd just managed to show, to his own satisfaction, that the saboteur could be none of the six.

What's more, there seemed no way for anyone at all, under any circumstances, to enter the TIC room while he was gone and to change over the scopes, activate the missiles, and so forth. After all, who would know just what to do? Woorden had pointed out the loophole: no one else knew just how the system worked, nobody but Angelo himself.

Of course, there was an answer for that . . . in fact, there were several, but all of them were either, as far as he could see, impossible or very, very disturbing.

Korky, he thought, might know—as a maintenance man, he probably knew, somewhere, everything about everything aboard the Station. How much good his knowledge had done, though, could be judged, once again, by Station conditions: the place, as Korky himself had complained, was falling apart. And you couldn't postulate—could you? Angelo asked himself reasonably—a man who was a genius of a mechanic whenever sabotage was required, and a pretty lousy mechanic under any other circumstances. No.

On the other hand . . . well, the more he thought about the notion of a saboteur, the more he realized, very clearly, that any such saboteur would have had to fool the fantastic battery of checks, tests, loyalty questionaires and all the rest which every one of them had gone through before being allowed up in the first place. Anyone trained to duck through that series might also be trained in the sort of sabotage required.

Which left the field wide open again.

And, then again, why postulate only one saboteur? There might be combinations—in fact, a combination, given the training required, was more probable than anything else. Any two, any three, or all six of the others might be leagued against him, against the Earth.

And there he came up against the final, rock-bottom question.

Where was there a sabotage group willing, even eager, to destroy the entire Earth?

The Asians had rebuilt, and had perhaps a stronger interest in preserving their own newfound life than any other group. The Western powers were still top dogs, and would be just as long as Orbital Station One was up there. And the Africans . . . well, nobody knew just where they stood: neutral, aligned-neutral, belligerent-neutral, or just plain undecided. But they, too, were coming up in the world—very far up indeed, Angelo told himself, since they had a Station of their own—and destroying that world hardly seemed to make sense.

No. Nothing answered the questions. This meant, as Angelo remembered an instructor telling him some years before, that the wrong questions were being asked.

But what were the right ones?

Perhaps, Angelo thought, he could come up with some. He had, at any rate, one answer already.

He could not let anyone on the Station know what he was doing, under any circumstances.

He had to work alone. Even a UN official might be in on the plot, helping to set matters up from Earth, helping the saboteur or saboteurs to pass through the checks and tests.

No one could be let in on the secret. No one at all. This one was Angelo's alone—Angelo DiStefano, Intelligence officer, against . . .

What?

XI

THE Comm Center door was open when Angelo reached it.

Not the usual small opening which Chris preferred. This time, the door was open all the way. Chris, apparently, had felt the need of more fresh air . . .

Except that, as far as Angelo could see, he hadn't. Inside the room were all the dinosaur-like screens and lights, all the panels, switches and the rest, even the big slab of desk with its central hole and its carefully ordered litter. Everything was there—except Chris Shaw.

Except the midget who never left the Comm Center.

Angelo checked everything, and carefully. He looked under the desk, went around to Chris's seat and peered under from there, too. He was crouched down, then, invisible, when he heard footsteps and looked up, his head in shadow.

Someone was entering the room. Someone quite a good deal bigger than Chris Shaw—next to Woorden, the biggest

man on the station. Dr. Emmis came in, walking as quietly as possible in one and a half gravities. He was carrying something. . . . Angelo strained to see it, and made it out at last.

A hypodermic needle. Loaded with—something. Nobody but Dr. Emmis would know just what, or, for that matter, just why.

Dr. Emmis, on catlike feet, despite the magnetic boots which everyone (except Angelo) was still wearing, entered the room and looked around. Obviously, he was as surprised as Angelo to find Chris Shaw gone; unlike Angelo, however, he made no major search. The little Intelligence officer kept his head down, watching, and remained unseen, unheard. Dr. Emmis, still holding the hypodermic needle, turned and crept out again, leaving the door just as he, and before him Angelo, had found it.

When a minute or so had passed, Angelo rose, feeling a bit cramped: the available space in the Comm Center was tailored to fit Chris Shaw, three and a half feet high, and even Angelo couldn't squeeze into such spaces without discomfort. But the discomfort, he told himself grimly, didn't matter: what did matter was that he'd just seen what might easily have been the act of a saboteur, looking for Chris Shaw, looking to overpower him with something in that needle, and take over Comm Center, get in touch with his fellows back on Earth, and somehow make final plans for the final destruction of the entire planet. It didn't make any sense—but nothing did, Angelo realized. Maybe everything was an accident (though that seemed a little hard to take); if not, what would some person on Earth be doing plotting the destruction of the planet he was standing on? One thing Angelo was sure of: new Orbital Stations couldn't be built in secret, and even if they could be the automatic tracking of the (he gritted his teeth) anti-missile-missiles would knock them out as they rose. So there'd be no way for the Earthman to escape. . . .

However, the picture of Dr. Emmis with his needle remained. It had to mean something—only what did it mean?

Angelo stared at the far wall. He was still staring at it, not seeing very much, when the air lock in that wall opened and Chris, complete in a tiny spacesuit, came through.

"Chris, what are you doing here?" Angelo asked, and realized a) that the question was silly, and b) that Chris couldn't hear him. The little man motioned with one big glove, reached around behind him to start unzippering the suit, and finally managed to crawl out of it, leaving a form-

less mass with a transparent helmet at one end lying on the floor.

"You've got to be a contortionist to get in and out of that thing," he said. "There must be a better design somewhere—anyhow, with the zipper in front, except that would interfere with the power pack, and if you can't reach that in a hurry . . ." He stopped and sighed. "I'd never put one on except in a case of absolute necessity," he finished bitterly.

"You had to go outside?" Angelo asked. "About the connection?"

"Connection?" Chris said. "That's simple enough. No, it isn't that—but when I tried setting it up I found there was something wrong with the antennae out there. Wasn't any other way to tell, so I went out to take a look. And—Angelo, it's horrible. I don't understand it, but what I saw out there . . ."

His eyes were black pools of horror. Angelo, imagining a hundred possible scenes, one worse than the next, and seeing behind them all the specter of quiet Dr. Emmis with his hypo—or (who could tell?) his scalpel, his lancet—Angelo took a long second before asking: "What was it? What did you see?"

The only question, of course, was *Who was dead?* but Chris had a more serious reply in mind. "The antennae," he choked. "They've been cut off. Just a few, so far—but who would do something like that? Sheared them off, clean. You can't tell me that was an accident, Angelo. There's just—just nothing. The antennae are gone. Gone, do you understand?"

The tragedy stunned Angelo for a second or two. Then he said, "Can you still set up the visual channel?"

"Visual—oh, I suppose so," Chris said. "But I can't get over it—the way they just—just disappeared. Some vandal, some barbarians . . . Who would have taken the antennae?" There were tears in the midget's eyes. Angelo waited sympathetically. After a few seconds Chris went to set up the circuit, a job which seemed to take about six hands and fourteen or fifteen pairs of eyes. Dials were everywhere, push panels abounded, and dinosaur after dinosaur had its neck twisted in the interests of a channel between Orbital Station One and UN HQ in Brasilia.

The job was fascinating to Angelo, if incomprehensible. He waited until at last Chris positioned him before one shining little dinosaur, and facing another. "This," the midget said carefully, "is your pickup. Stand in front of it and talk into it. Over there, to one side, is your screen. You'll see and

hear UN HQ from there. Everything ought to be fine." His voice nearly broke. "And if this costs us the entire board, after the antennae going the way they did—" He swallowed hard. "Well, I hope you'll be satisfied, that's all. I hope you'll be satisfied."

There was no reply possible, and Angelo waited out a second before asking, "Is it working now?"

"I can switch it on whenever you say," Chris told him slowly. "If you really insist that you want it this way."

"I do," Angelo said firmly, like an unafraid bridegroom. "And I want it on now—and I want to be alone."

Chris stared. "Alone?"

"I've got to be," Angelo said. "I won't damage anything."

"You won't touch anything," Chris told him savagely. "If I come back and find one dial changed . . ."

"Not a thing," Angelo said. "If you'll switch it on—"

Muttering something uncomplimentary about Intelligence, Chris went to the back wall and pushed one last panel. Without waiting to see what would happen, he turned and stalked, tiny and steaming, from the room. Angelo saw his screen light up, slowly, and waited for someone to appear.

Someone did. Angelo didn't recognize the French general, but the uniform was identification enough. There were decorations for virtually every battle of the last thirty years hanging from the jacket, and the cap was set in precisely the correct line. The General's eyes were hard and shrewd, the lips thin and tightened in a narrow line. This one, Angelo knew, was the real thing—he'd have thought the General a full-time professional, a graduate of St. Cyr, if it weren't for one fact.

The General was female.

She opened her mouth, and Angelo heard a voice that wasn't hers, saying words that had nothing to do with her lip motions.

Orbital Station One: This is a priority message. Repeat, this is a priority message. From this moment on you are directed to conform to Alert Status Prime. Repeat, Alert Status Prime. All firing circuits are to be activated. All firing circuits are to be activated. This is not a drill. Repeat, this is not a drill.

Angelo knew perfectly well what that meant, and knew, too, that it was being broadcast automatically throughout the Station. As a priority message, it would override any conversation he might have had during that minute or so

with Madame General, but he could recover lost ground, he told himself, rapidly. More important, the message meant that the Second Asian Land Army was now definitely on the move, that war was imminent—and that, most horrible of all, the missile system was now on alert. At any minute the arming signal might come through, allowing them to be fired . . . and the targets listed on the scopes were every major city in the world. Unknown to whoever at the UN pushed the button, the button would destroy the world.

Or maybe not unknown, Angelo told himself. Suppose the button-pusher was the Earth contact of his saboteur? He had to leave blank any reason for the contact to have waited so long (let alone any sensible motive for his actions), but anything, the way matters were shaping up, was possible. And—

The French General was now speaking to him. Angelo listened to the accented English of the hard-eyed woman. " . . . have had no reports from you for some time, monsieur, which is not the manner in which these things are to be arranged. I would wish that—"

"I've made reports when there was anything worth reporting," Angelo said.

The General smiled: not, he thought, a pleasant smile, and certainly not one he was used to seeing on a female face. "Ah," she said, "but that is for us to judge, is it not? I should think that your occupation up there would be to report, and to take such instructions as we give you from time to time. I see no necessity for your prejudgment of the worth of these reports, monsieur, and I will say frankly, very frankly, that I am not happy about the long delays—hein?—between your carefully doled-up messages to us." Angelo, momentarily fascinated by the puzzle as to whether the woman had meant "doled out" or "dolled up," decided, nevertheless, that he had had about enough. After all, he had a job to do—and, to judge from the priority message, not a great deal of time to do it in. There was one more chance.

"I request," he said formally, "an immediate connection made, through UN HQ, between this station and Orbital Station Two."

The General froze, staring at him coldly. "I cannot but refuse this request," she snapped. "Once again monsieur, you are fiddling behind our backs, and we will not stand for it."

"All right," Angelo said, out of patience. "Sit down for it then. But the request is within my powers, up here, and

I hereby make it again. You have no authority to refuse me, and, though I'd hesitate to do so to a general officer, I'm perfectly capable, if you like, of changing the request to an order."

"Monsieur—" the woman said, and stopped. There was a silence filled with a great many emotions.

Angelo, outwardly calm, waited.

And, finally, he had his answer.

"The hookup—*hookup* is your word, is it not?—the hookup is now being made," the woman said. "Within seconds—"

And she was gone. Angelo was staring at the most amazing creature he had ever seen. Even Angelo, accustomed to oddities since they appeared so steadily in his mind, was taken aback once again by this new one. For a few seconds, in fact, he didn't even believe his eyes—or, rather, the eyes of Chris Shaw's electronic *amour.*

XII

THE African was dressed in what seemed simultaneously to be a normal Station suit and an absolutely authentic tribal costume. After a bit, Angelo, his eyes blinking with effort and amazement, was able to figure out what had been done: a special bonding paint had been used on the fiber glass covering, and the suit decorated in the fashion of what appeared to be a Kikuyu tribe, though Angelo would not have sworn it wasn't (for example) Zulu. "Look," the Intelligence officer said quickly, "I can't maintain this hookup any longer than I absolutely have to. I've got to—"

The African said exactly two words, very clearly. Unfortunately, they did not mean a great deal to Angelo. Holding up a stern hand, he ordered: *"Sema Swahili."*

Angelo took a breath. Guessing at the meaning, he managed to enunciate, with great clarity, "We must speak English." This was not strictly true; Angelo, in fact, spoke a little German and enough Arabic to get along with. But it would serve, and he had neither the time nor the inclination for long discussion.

As nearly as Angelo could understand it, the African said, explosively, *"La,"* and followed it with: *"Kisima kilichokauka chafaa nini."* This did not seem to advance the cause of international relations; what was more, it didn't seem to help Angelo's mission a great deal.

"But I've got to speak to you," he said, "and I don't speak Swahili." The African, arms folded across that odd

combination Station suit and costume, regarded him with a grave, distant impassivity.

"*Simba anapolia tunaogopa sana,*" he said. This was accompanied by an ironic glance, which did not help Angelo's poise, either. First Chris, then the female General—and now this stolid, immovable African talking Swahili. Angelo exploded, violently and with much accompanying dust and smoke.

"Look," he said loudly, "I've got to talk to your Intelligence officer. It's absolutely important. I've got to get him on the screen."

"*Nitakapomwona,*" the African said, and shrugged.

"It's vital, can't you see that?" Angelo shrieked. "All right, I'm an ignorant barbarian who doesn't speak the great cultural language of Swahili, but I'm still Intelligence officer on Station One, and I've got to talk to my opposite number there! Now go and get him! That's an order!" He reflected that he was giving a great many orders lately. . . . But, then, there was no help for it. And even a poor Intelligence officer like himself had to use his authority once in a while: that, after all, was what it was there for.

The African shrugged and delivered himself of a fine long train of syllables. "*Sijui kama atakuja kweli—labda hatakuja. Mdudu!*" Then he turned and left. With some remaining hope, Angelo waited for the arrival of the Intelligence officer for Station Two.

The wait was a fairly long one.

Then, at last, someone showed up on the screen: the original African, as impassive as ever, his arms still folded. For one second Angelo was afraid he was going to be treated to a new cascade of Swahili, but then another figure stepped into view, and Angelo recognized the hand-sign made by his opposite number.

The African Intelligence officer was a medium height man with absolutely black skin, large eyes, and what looked like a very helpful sort of physique for dark alleys and the like. He, too, was dressed in the tribal Station suit which Angelo supposed was *de rigeur* (whatever the Swahili phrase for *that* was) aboard Station Two, but, as Angelo heard with delight, he was speaking English. English of an oddly lilting, accented variety, but quite understandable English. Angelo felt like getting down on his knees and offering a prayer of thanks for this—but, then, he had no time.

"It is good to speak with you," he was saying. "We have too little contact, your Station and mine—and, since we are both apparently condemned to be 'stuck' up here for

the near future at the least . . ." He shrugged. Angelo could have sworn he'd heard the quotation marks drop around that one slang word. But he was beyond carping at minor differences.

"It's important that I speak with you, now, and alone," he said.

"Impossible." The other African looked baleful.

"All right." Angelo continued to talk, and at the same time let one hand fall into the patterns of the deaf-and-dumb code which was common throughout Intelligence services. The visual circuit had turned out to be the necessity he'd thought it might be, after all.

The conversation, on both levels, was a short one. There was no way, absolutely none, to find out whether or not the Africans were prepared to use their own missiles—or even to discover what targets those missiles were set for. That they would use no arms against the West, he knew, and confirmed (but was Woorden's South Africa the West?)—what else would happen was still unknown.

He checked his own zero-set readings against theirs. That much was simple, and was the main mission of his call.

The zero-set had not changed.

Beyond any doubt whatever, the trouble was on Orbital Station One. There was no error, no sudden freak change due to sunspots, or magic, or anything else.

He was, once again, alone.

He nodded on receiving this information, and the African with whom he had first spoken cut in with a savage burst: "*Lazima aende!*"

The black Intelligence officer translated that one, rather sadly, Angelo thought. Well, the life of an Intelligence officer was not all beer and skittles, whatever skittles were. "He says, 'He must go,' " the Negro told him. "I am terribly afraid that he is right; this contact between our Stations is cheering, one realizes, but it is not good for morale here—or there, for that matter." His fingers were signing off at the same time, and Angelo felt no need to explain that Station One's morale would suffer no damage, since nobody on the Station knew who he was talking to.

"Okay," he said, signing off with his own hand. "Sure. See you again some time."

"I very much hope so," the Intelligence officer said. The screen snapped off.

Angelo, touching nothing except the floor, went to the door, dilated it and walked out toward a waiting, white-faced Chris Shaw.

"Hurt anything?" Chris asked anxiously.

"Didn't touch a thing," Angelo assured him, and went on back to TIC, hoping that he looked a good deal more cheerful than he felt.

How much time was left?

XIII

AS IT happened, there was a good deal more time than Angelo had bargained for.

There was time enough for the gravity to switch back again and again, for meals to arrive in strange states, for mechanicals to lurch around, for the lights to go on and off endlessly . . . for the Station as a whole to continue its slow process of falling apart.

There were, in fact, days.

Days in which Angelo kept turning the few facts he had over and over in his mind, waiting for them to make anything resembling sense. They never did, at least not for a long time, but there was nothing else for him to do. The Asian Land Army was moving, and the Alert Status notice had never been taken down. At any second, the two hundred bombs might head for Earth—screaming straight down, untouchable therefore by the anti-missile-missiles (Angelo had reached the state where he no longer even cared about the sound of the words), heading for every major city on the planet. After that, of course, it would no longer matter whether or not Angelo could get down—whether or not any of them could ever return to Earth; there wouldn't be anything much left to return to.

But that thought, though it kept coming back to serve as a dark underpainting to his imagination, and his deductions, wasn't all there was. He knew, now, that the scopes hadn't been altered by some natural effect, since the scopes on Station Two had remained constant. He knew they hadn't been altered by accident, since he was completely unable to picture an accident which would have those results, even when he rang in Finagle's First Law: "If anything can go wrong—it will." No matter what had gone wrong, and what combinations of errors had followed, the scopes would not accidentally, all by themselves, have shifted to cover the Earth.

No, they had been shifted, and purposefully, by someone. Or something.

Unfortunately, he had managed to show that the notion

of anyone on the Station doing the job was completely nonsensical. He had also managed to show that, if there was an alien aboard somehow messing things up, he was (or she was, or it was—what sort of pronoun, Angelo wondered idly, did you use for aliens?) a remarkably stupid sort of alien monster. Setting the scopes made certain that Angelo would find out what was going wrong; little tricks like the magnetic shoes walking all over the Station made no sense at all, no matter where you started from.

And as for combinations of people . . . that, Angelo thought, came from the same idiotic bag in which he'd first found the notion of a single Station saboteur. If he couldn't imagine even one person performing the sabotage, he was no better off when he tried to imagine two or more.

No. Aliens were eliminated. Station personnel were eliminated.

And that left . . .

The eclipse was due within twenty-four hours when Angelo suddenly realized what it *did* leave—and rejected the whole idea.

After all, who knew the machinery better? Who was in a better position to fiddle with the scopes? Who kept having these incredible fantasies about an alien race nobody had ever seen, or detected, or even, really, postulated?

Who but Angelo DiStefano?

Of course, Angelo had no memory of having performed these fatal acts, but, then, wasn't it possible that he was in some manner a secret schizophrene, himself a leading candidate for the position at American Memorial Hospital which he'd offered to Woorden a few days before? Of course it was.

If Angelo himself, in some sort of split personality insanity, was doing all the dirty work around the Station, everything made sense—even the fact that most of what had been done was simple nonsense. You couldn't expect a Jekyll-and-Hyde personality, especially when one was completely divorced from the other's memory, to come up with anything that would pass stringent rules of logic, or even rationality.

As a theory, it was beautiful. Unfortunately, Angelo didn't believe a word of it.

If he'd had such a split personality going for him, wouldn't tests on Earth have shown its existence? And the additional factor of simple stress through being on the Station eight months and more instead of the originally-planned three was not going to be all that important. Angelo, who like most men in his profession was a jackleg psychologist, couldn't quite accept the notion. It would take more than

stress to defuse a previously fused personality; anyhow, it would take more than the stress of being aboard the Station. Maybe, if people were shooting at you all the time, and while that was going on there was a dentist at work on back teeth with a drill, and somebody was playing the electronic music of, say, John Cage or one of those old madmen as a background to it all—maybe then you could talk about stress causing personality split. In a situation like that, there was very little, Angelo told himself, that *wouldn't* split, straight down the middle. Starting with that dentist, if Angelo had anything to say about it.

But such foozling got him nowhere. He sniffed experimentally, realized that his nose had cleared—he'd been a good deal too busy during the past days to pay any attention to the sniffles he'd been developing—and this cure answered to an old theory of his that what most colds wanted was attention, like naughty children; stop paying attention to them, and they'd go away. As his had.

It was a bright spot. It was, for a time, the only bright spot in his world.

He reviewed the crew again. They passed in parade before his mind's eye (with Juli waiting perhaps an extra second so that he could really get a good look at her. . . . *My goodness, those sex-suppressants really had given out, hadn't they?*) and he could only shrug with helplessness. Nobody could be the saboteur. But somebody had to be.

Maybe—just maybe—there really was an alien. Angelo tried to recall how many times he had edged up to that thought, and how many times as slowly edged away. It was one thing to say that, if there was an alien, he'd be a remarkably stupid one—but who was to decide that aliens *couldn't* be remarkably stupid? Did they all have to be geniuses? Maybe there were backward aliens, underendowed types with, like Winnie-the-Pooh, very little brain. And, if so . . .

If so, he suddenly realized, there was a way to prove it. If the aliens were moving not only in mysterious but in downright idiotic ways their horrors to perform, Angelo knew just how he might be able to track them down.

Unfortunately, his method involved a little cooperation from Woorden. From (if you please, and Angelo didn't) Lieutenant Commander Woorden, navigation officer.

Well, every silver lining had a cloud hidden in it somewhere, he told himself, wondering whether or not that meant anything.

Woorden, standing like an Old Testament figure at the door of his offices, looked at little Angelo with something approaching contempt. "You want me to do this thing?" he asked. "You wish me to perform this remarkably unnecessary evolution? You are quite serious? It is not some sort of joke?"

"Yes," Angelo said, "and no."

Woorden said "What?" but Angelo was going on regardless.

"Yes," he said, "I want you to do this thing. No, it is not a joke. If you throw me four questions at once, what do you expect? Sensible answers?"

Refraining from pointing out that Angelo himself had tossed two questions at once (perhaps, Angelo thought, he didn't realize the fact), Woorden said, "But it is nonsense. This idea of yours—do you know what havoc it may work among the personnel? You must think carefully before you make your requests, Mr. DiStefano." His voice was mild, but behind it thundered Jahweh himself—so normal a matter for Woorden that Angelo didn't give it a second thought.

"Havoc isn't important," Angelo said. "This is." He didn't tell Woorden just why it was important, on the principle that had kept him going for days: as long as there was the slightest possibility that he was dealing with a saboteur aboard the Station, his best bet was to keep his eyes open and his mouth shut. The picture this phrase evoked reminded Angelo just a little of a large bass refusing to snap at a hook, but he resolutely ignored that. "And it isn't a request; it's an order." He reminded himself to make a tape of that phrase, and have a mechanical carry it around for him: he was getting awfully tired of having to say it.

Woorden muttered something in a language Angelo didn't understand. Then, very slowly and heavily, he nodded. "All right," he said. "All right. What you want—it will be done for you. If you will return to your own offices, I will inform you by radio what has been done as soon as possible."

"You're sure you can—" Angelo began.

"I am absolutely sure," Woorden said. But somehow, Angelo told himself, he didn't look it. And, on the way back to the TIC room, he wondered what that lack of certainty meant. And the look of panic on Woorden's face during an earlier interview . . .

Nothing, probably. After all, the man had had almost nothing to do with his instruments since they'd locked on to the Station eight months before. A little nervousness, a little fear, might be perfectly natural.

Angelo went on telling himself that until he reached TIC. Once there, he sent out an intercom call for Korky.

"I want you to check out the target scopes," he said when the slow-spoken Slav arrived. "I've got to know if they're functioning perfectly."

"Function? Perfect?" Korky asked, in the same guttural abandon which was his usual tone. "Of course not. Nothing on Station functions perfect. All gone to pieces, all gone to small bits." He waved his arms. He was not, Angelo saw, exactly sober this time—but, then, he wasn't exactly drunk either. It was sometimes hard to tell with Korky: the big Russian was generally at least half-seas' over, but that first half didn't really show up unless you knew where to look for it. In the current Station gravity (seven-eighths normal, for a wonder), a little weaving and lurching wasn't really out of place, and Korky wove and lurched with the best of them, looking just a little like one of his own mechanicals as he did so.

"Nevertheless," Angelo said, "I want these checked out. Now that we're on alert you know how important that can be."

"Ah," Korky said, in a sigh Angelo had never truly found letters for. "Everything important, everything vital. I know that, too. But can only do what is possible. I send mechanical up to fix."

"I'll be waiting for him," Angelo said. The big cook and maintenance man turned and managed to find his way to the door. There, as the door dilated, he paused with his hand bracing him against a wall.

"You find nothing wrong, you come to tell me," Korky said. "Only thing on Station that works right, then. We have big celebration."

"Sure," Angelo said. "Only thing that works right—except for the bombs."

"Bombs?" Korky said with real horror. "You never use bombs. They make too much to destroy. Not good. Better even fall to bits little by little, but never use bombs. You promise?"

"Korky," Angelo said, "I can only do what I—"

"Promise?" The man was very big. His voice was threatening, guttural, deep. And what did a few words matter?

"Sure," Angelo said. "I promise. I'll never set the bombs off."

Later on—much later—he remembered that.

But by that time, of course, it was too late.

The mechanical that was fiddling with dials and panels, Angelo noticed, had one full-human hand (except that the fingers ended in screwdrivers of remarkably small size) and it looked so happy and peaceful. Except that mechanicals never hummed. In proper operation they never even made a sound.

This one was going *clunk* at irregular intervals, and, once in about every six *clunks*, emitting from somewhere in its interior a tiny *wheep*. Angelo sighed. Korky had been right: nothing on the Station worked the way it should. In fact, even the lights were flickering, as if undecided whether or not to stay on.

Meanwhile, the intercom boomed out, "We are now realigned. Mr. DiStefano, we are now realigned." Woorden, despite his fears, had shown himself a master of his craft: on board the Station, no one had felt so much as a single jar when the massive wheel turned the Station to just where Angelo had wanted it—its armaments lining up on Mars and the moon.

The mechanical continued its apparently aimless fiddling, now and again clunking or wheeping. Angelo waited until it was through, and began to turn and go out the door (which it opened, as Korky had obviously instructed it). When it had gone Korky's voice came through instantly:

"Nothing wrong with scopes. We have big celebration—only thing on whole Station works right."

All right, Angelo told himself, there was nothing wrong. In that case . . .

He went to the scopes and lined up Mars and the moon as possible targets.

And the scopes refused.

Neither target would show up, neither one would be accepted by the machinery. And if the machinery, as far as Korky and his mechanicals could tell, was in perfect working order, then . . .

Then, he told himself sickly, he had an alien on board.

An alien aboard the Station. The thought was almost too familiar to be frightening, but Angelo managed to be frightened in spite of that.

There was still one more thing to try. A radio link to Woorden was operative. He keyed it in, and heard the Boer's voice asking with a dull anger, "What now, Mr. DiStefano? What now?"

It was a good question. "Realign the Station," Angelo said, "and then key in the bombs manually. They can't be

fired without the automatics okaying it, so there's no need to worry—"

"I am quite familiar with the operation of these—these horror-things, Mr. DiStefano," Woorden replied.

"Okay, then," Angelo said. "Let's run a check: manuals against the scopes from here. Take all the time you want."

"Half hour," Woorden said, and the link cut off.

Angelo waited. Time slid slowly by. An alien? Or a schizoid Angelo? Or one (or six) of the station personnel? Or—

Or what? He had the strange feeling that he had slipped past the solution not only once, but over and over in his reveries, but no matter how he went back to check he could find nothing but puzzle upon puzzle, question upon question. Time ticked by. The eclipse was nearing. And during the eclipse the Asian Land Army would probably attack, selling the thing to their men, who were as ignorant of astronomy as any normal group of peasants, as a sign from the heavens of their coming success.

Time went by.

And Woorden reported, "Realigned, Mr. DiStefano. Please give me information for your manual check."

Angelo targeted Asia on the scopes. The scopes appeared to respond perfectly. At random, he picked a possible city and keyed in Hanoi in New China. The scopes showed up Hanoi.

Angelo repeated the reading to Woordon over the radio link. "Please set this reading manually, and report result," he said.

And more time went by . . . until Woorden at last replied: "Reading corresponding to yours is targeted for New York, Mr. DiStefano. Is this satisfactory?"

Oh, sure, Angelo thought. *It is just fine. Wonderful. Not only are the scopes grandly picking every target on the face of the Earth—they are now lying about what target they've picked.*

Now, he asked himself dully, *what's to be done?*

There was, of course, only one last desperate move.

XIV

ANGELO entered the Comm Center at a dead run, and skidded to a stop before the great desk. Chris, behind it, was lovingly turning a tiny electronic part over and over in his hands. When Angelo burst in he looked up, startled.

"You almost made me drop that!" he said. "Angelo, you're

going to have to take some care. After all, these are machines I've got here. *Machines;* understand?"

Almost, Angelo did. But he wasted no time on commiseration. "I've got to have a hookup with UN HQ," he said. The missiles would not fire on prescribed targets. They were going to blanket the Earth. Therefore, the UN had to be told that the missiles could not, under any circumstances whatever, be fired. And told, in view of the coming eclipse, very fast indeed.

"You can't have one," Chris said sullenly.

"But I've got to—"

"It doesn't matter." The little man's sweet voice was sad and distant. "Board's burned out—too much of it, anyhow. I warned you."

"Spares," Angelo said. "We've got to have—"

"Not after eight months, we don't," Chris Shaw said flatly. "There are no spares. Nothing to rig a new board with, nothing to get you the UN hookup with, nothing to make most of this operation live again." He stared down tragically at the shining little part.

"But you don't know how important—"

"It doesn't matter," Chris said. "There isn't any way."

Angelo shut his eyes. Somewhere, there had to be an answer. Somewhere, he knew, there was an answer to everything—to the Station's problems, to the scopes, to the missiles, the gravity, the lights, the mechanicals . . . but he couldn't think of—

Suddenly, he could. He opened his eyes.

"The mechanicals," he said.

"The what?" Chris said. "Angelo, they haven't got any power. If you want to try to broadcast through a mechanical—the thing's impossible. Absolutely impossible. Don't joke like that."

"Not broadcast through one," Angelo said. "But suppose we catch one and cannibalize it for spare parts?"

There was a long, astonished, and respectful silence.

"You know," Chris said with awe, "we could do it. Those mechs have all we need—have to fiddle with the stuff a little, but nothing difficult, not really. Now, if we took one of the F6FX platens from the power pack and hooked it in with a sustaining grid to spread the power, we'd—no, you'd have to have copper plate, too, but that's no problem. There's plenty of copper aboard, nobody knows what for except minor repairs. Wire, some of it, but there's some in plate form too, and we can—"

"Chris," Angelo said.

"—start with that, use the platens and the grid, and bypass one whole sector of the board. If we need to rig a substitute for resistors, there's enough stuff inside the mechs to do that without much rearranging; some of it's right in the circuitry, and we only have to hook it out, and for the rest we can shadow out a printed circuit with a couple of inches of—"

"Chris," Angelo said desperately.

Chris blinked. "What?"

"Don't tell me how you can do it," Angelo said. "Just tell me whether you can or not, and we'll go out and catch us a mechanical. Please?"

"Well," Chris said, "well, one more thing."

Angelo sighed. "What?" he asked.

"We can't tell Korky. He loves those crazy mechs. He'd kill us."

"I suppose so," Angelo said. "But, as for catching one . . ."

"No problem, no problem," Chris said airily. "I can get into the service corridors and flush one out. Or there ought to be one passing shortly. Nothing to it." The midget beamed. "Angelo, it's a great idea. Hooking the board up again—why, it'll be just like old times!"

Angelo shivered. He flipped an intercom button, connected himself with Woorden, and ordered him to disconnect the automatic and stand by on manual control. Woorden sounded oddly pale, sad, washed-out, and Angelo asked, "What's wrong?"

"Wrong?" Woorden repeated listlessly. "Nothing. Nothing at all." There was a click.

Well, Angelo told himself, this was no time to brood about the navigator. Instead, he followed Chris to the air lock, where Chris began suiting up for a trip into the service corridors. Before the midget got his space job on, though, Angelo heard a clanking, and tapped him.

"One coming," he said. "Down the corridor."

They jumped for the door and burst out into the corridor just as Dr. Emmis, with a wild stare on his face, came running toward them. "Wait—wait—listen!" the doctor was shouting. "This is important! DiStefano, Shaw, wait—!"

There was no time to wait. They flung themselves on the robot.

The robot unexpectedly (to put it mildly) lunged to one side. Angelo, Chris, and—drawn in by the situation—Dr. Emmis flung themselves at it. The robot was flailing as if, impossibly, it was trying to get away.

And then the impossible became fact. As Dr. Emmis went

on screaming, "It's vital . . . Korky's been taking LSD or something like it, doesn't know it. You have to listen to me!" his voice was drowned out.

The robot began to hoot. The hooting was brand-new, impossible, and very loud. Chris was holding the head, gripping the pointed ears; Angelo was down below, and Dr. Emmis was grabbing for anything he could get. And the robot went on. No word could be heard. The hooting was constant.

It was a signal, Angelo thought, a signal of some kind. The entire Station echoed unbearably with it, and it went on and on.

Even after five other robots came out of the walls, and headed for the three human beings.

The Station was under attack . . . from within.

The robot went on hooting. Angelo was certain he would go mad, and longed for it as a relief.

The five other robots, armed with only their metal bodies and their tool-like hands—which was enough—came on.

"Help!" Chris was saying, barely audible in the space between hoots. "Help! Help!"

But, of course, there wasn't any.

PART THREE

XV

THE robots had arms that ended in welding torches, which was not, Angelo told himself, a pleasing sight. As they came closer, the torches ignited.

There was no doing battle with these flaming maniacs. Angelo and Dr. Emmis realized this at the same time, and began to disengage themselves from the mechanical they had already tried to capture. Chris, however, was deaf to pleas, entreaties or just plain common sense. A device on the robot's back fascinated him, and he was trying to disassemble it as the other two prepared for a strategic, and very hurried, retreat.

Now all the robots were hooting, a sound which echoed through the Station as if all the electronic musicians of a hundred years before had simultaneously gone mad. Angelo, watching those lit torches with one eye, trying to fight the mechanical with the help of another, and watching Chris with a third (people seemed to grow these extra limbs, or something, in emergencies), finally managed to drag Chris off the thing and pull him along a path to a safety that was at least temporary: Angelo's pride and joy, the TIC room.

The fight continued, though. Now, as Angelo looked back, he saw the five new mechanicals beginning to carve up the hooting one. *Well,* he told himself, *as long as they're fighting among themselves they're not going to bother us.* He wished he believed that.

Suddenly, Chris, holding the object he'd wrested from the mechanical, broke free.

"Hey," Angelo said helplessly.

"Going to Comm Center," the midget said breathlessly. "Got a passage through the service corridors, or some other way—don't worry about me. Have to analyze this thing. Looks like a brain or something. Don't worry, I'll be in touch."

And he was gone. Angelo thought the notion over. If the mechanicals had brains, then the mechanicals could think . . . and what did that mean?

He didn't instantly know. But he knew it wasn't going to be pleasant when he finally figured it out.

Far from it. Angelo rushed down the corridor—meeting no other mechanicals, for a welcome change—and reached the door of TIC. Dr. Emmis followed him in. The door dilated open, and then shut: they were safe and protected.

Now, Angelo told himself, they had nothing to worry about—except (in order):

a. The eclipse.
b. The Asian Second Land Army.
c. The missiles, which would fire—but not on assigned targets.
d. The mechanicals, who might at any second burn their way through the door.
e. Whatever it was Chris was holding.
f. And whatever it was Dr. Emmis had been saying so frantically.

"All right," Angelo said when both sets of breathing apparatus had returned to something like normal, "what did you mean about Korky?"

The doctor took a deep, ragged breath, his eyes filled with horror.

XVI

"KORKIANOVICH has a great deal of LSD in his system," Dr. Emmis said. "I cannot convey to you the seriousness of this."

"Convey it to the mechanicals," Angelo said. "*They're* certainly serious enough. What Korky's interior system has to do with that I can't imagine, but we can worry about the health of our cook a little later, when we're sure we'll be around to eat what he cooks. After all, Doctor—"

"Please," Dr. Emmis said, in the same gasping, horrified tone. "You don't understand, DiStefano. From somewhere—I would suspect a trace element in wherever his alcohol is coming from, and my analysis gives a fair idea of that, as well. DiStefano, do we have any rye on board?"

"Rye?" Angelo said. "There's no alcohol of any kind. Nothing like that—"

"No, no," Dr. Emmis said impatiently. "Rye. The grain, not the whiskey. Is there any of that on the Station?"

"There must be some," Angelo said. "Juli—Dr. Dental would know. What with the plants and the ecological experiments and everything else that got sent up here, for one reason or another, there's bound to be. But what does some grain or other have to do with the mechanicals?"

Dr. Emmis snapped bitterly, "Not the mechanicals—Korkianovich. He's been distilling whiskey—he's had the mechanicals distilling it, at any rate—from rye grain. And the rye has mutated into a form of ergot."

"Ergot? I thought you said—"

"I did," Dr. Emmis went on. "LSD. It's an ergot derivative, basically, and what Korkianovich has been filling himself with is LSD, or a very close variant of it. A hallucinogen, and a powerful one. I tell you, it's dangerous!"

Angelo sighed. Over the months, he'd become used to the doctor's speeches about alcohol, smoking, cholesterol—even athlete's foot, which was something in which Angelo decided to have no interest whatever: he was not, after all, an athlete. And here was one more speech about the Danger Of—something or other. This time it was LSD, and what difference did it make?

What did make a difference was Angelo's list of worries. "Any minute now," he said slowly and clearly, "we are going to get a message from Earth. It is going to give us the arming signal and tell us to open fire. You know that, the whole Station knows it, ever since we got the alert-status message four days ago. And until we can round up the mechanicals, or nullify them, or something, how are we going to respond?" Angelo didn't add that the target scopes blanketed the Earth; that, still, was his own private information, and he saw little if any need to pass it on to someone else. He still remembered Dr. Emmis' silent stalking with the hypodermic needle, and he still wasn't sure what it meant.

For the moment, though, the mechanicals seemed to be the first problem on the list. "All right," Dr. Emmis was saying, "all right, but don't say I didn't warn you. LSD appears to work in the same manner as many other drugs, heightening whatever feelings you have at the time. It doesn't make you happy, for instance, unless you were happy to begin with. On someone of Korkianovich's temperament, the effects produced might well be serious, not only to him but to the entire Station. The nervous system itself is involved—"

"Sure," Angelo said. "But now I've got to do some work. I've got to figure out how to outwit these mechanicals now that they're after us, or seem to be."

"The mechanicals are not the problem," Dr. Emmis said stolidly. "Korkianovich has been introducing into his system regular amounts of a dangerous hallucinogen, and it is now absolutely necessary—"

"Doctor," Angelo said quietly. Dr. Emmis stopped, took a breath and asked, just as quietly:

"What?"

"Please," Angelo said, "shut the door quietly when you go out?"

Dr. Emmis' face turned, very slowly, from pink to a medium red. He said nothing whatever beyond: "You'll see. You'll understand." He stalked to the door, dilated it, and stepped out into the corridor. Behind him, the door collapsed again into a shut position.

Angelo wondered whether he'd delivered the good doctor over to the mercies of whatever mechanicals had been roving the corridors outside. But he doubted it; apparently the things were programmed to attack only when a human being attacked them. Or else they were being very subtle: any mechanical could have begun burning, or chopping, or slicing, his way through the TIC door, and all the other Station doors, quite a long while before. In any case, Angelo felt he'd had about enough of the doctor's lectures; now, he decided, there was a lot to do.

As, for instance, sitting down and worrying. Worrying, in Angelo's eyes, was one of the things he was best at—and there was certainly enough to worry about. For one thing, there was the . . .

A click told him that the intercom was on, and a sweet voice instantly thereafter told him who'd got in touch with him. "Come down to Comm Center," the voice said, "on the double." The little man, Angelo reflected, certainly had a big voice now.

Why Chris had called Angelo worried him about halfway to Comm Center (during which passage he went by two mechanicals, neither of which, despite the fact that his blood froze in his veins, gave him the slightest glance). Then he bumped into Dr. Emmis, heading for the same place, and realized that Chris had called them both, as witnesses to the very first battle between Man and Mechanical. Dr. Emmis said nothing at all, but stalked on ahead of Angelo's shorter, quicker strides, his face a mask of worry that made Angelo's efforts in that direction look amateurish.

"What's going on?" Angelo called, but Dr. Emmis went on, and Angelo followed, his worry beginning to rise, until at last they were in the Comm Center, where Chris stood to

greet them, three and a half feet of what looked like machine oil, with a broad, beautiful smile on his face and both hands extended to show the object he'd taken from the mechanical.

Angelo shut the door. "All right," he said. "What is it?"

Chris lifted the object. "I've got it connected to a computer," he said. "What you have to hear is—"

His voice faded as something began to talk. Angelo expected it to be completely unfamiliar; the trouble was that it wasn't. Instead, he recognized it almost at once.

"Do what must be," the voice said in deep gutturals. "We fix all, we let nothing go. When we finish, all is complete. No thing to stop us."

"My God," Angelo said in a whisper. "It's Korky."

Chris shook his smiling round head. "No, it isn't," he said. "It's the mechanical—the thing *is* talking."

XVII

"YOU MEAN—" Angelo began, while Dr. Emmis stared in stunned silence.

"I mean it's a brain," Chris said. "The thing's got a brain, a real one. Before, it was programmed to react to simple stimuli. Oh, if it saw a burned-out light patch it might message it in to another mechanical, or else go and get a new patch and put it in automatically. But now—"

"Now," Angelo interrupted, "it's programmed to react to us. And to talk like Korky. Listen, Chris, what *is* this thing?"

"It's got self-awareness," Chris went on happily. "It isn't tied to basic stimuli—it's something a lot bigger than that. Self-awareness . . . a thinking machine. That's what the mechanicals have turned into. Now, isn't that something?"

"Something?" Dr. Emmis exploded. "It's the end of us all! It's what I warned you about—"

"Warned me?" Angelo said as the doctor waved a finger at him. "Listen, forget all that. This self-awareness—does that mean all the mechanicals are just like people now?"

"No," Chris said. It was plain that, if they were, he might not like them nearly so well. "They're a—a sort of hive-mind. All controlled by a computer, somewhere. And the computer—"

"The computer is programmed by somebody else," Angelo said with the light of sudden revelation, "who also fixed up the mechanicals—and that means only one person."

"Fix," the mechanical was muttering. "In no time, fix all, then we be finished. We all finished very quick now."

"Korkianovich," Dr. Emmis said. Angelo nodded.

"Right," he said. "But why?"

"The LSD," Dr. Emmis said. "I told you it might have a dangerous effect on anyone here, building up whatever mood the person already had, giving him the belief that his fantasies were finally real. . . . Of course, when he—ah—sobered up, there'd be no memory of the event. But while he was under the influence—"

"He'd go around fixing mechanicals," Angelo said. "And fixing them so that—wait a minute. I still don't see any reason. I don't really see anything, not for certain. If Korky fixed the mechanicals this way, they ought to be drawing more power. But—" An idea struck him just as Chris interrupted.

"They are drawing more power," the midget said. "That's why—that's one of the reasons things are going wrong. I went out into the service corridors to take a look, once I knew what we had here." Angelo pictured the little man, the only one who could comfortably even get into those corridors, snaking along, keeping a lookout for mechanicals. "The whole system's lined with copper wiring," Chris went on. "The mechanicals are drawing power from the Station pile, and the stuff seems to be a closed-circuit communicator between them and the computer."

"Computer?" Angelo said. "Then, if we knock it out—"

"We can't," Chris said. "There are computers all over the Station. These mechanicals can be hooked in to any one, or any sixty. But that wiring—let me tell you, that's really something. Beautiful, complicated—" Chris, in fact, seemed to be proud of the mechanicals for doing such a complex job.

Angelo, slowly, asked, "Chris, would there be any magnetism in that circuit? I mean, could it magnetize the walls, or something like that?"

Chris looked patient. "Angelo, I thought you understood something about this," he said. "Look. The copper wiring plus an electric charge adds up to a fantastic magnet. If a mechanical was recharging himself—which they'd have to do, now and then—the whole area would be magnetic. The mechanical would retain some residual magnetism for quite a while. But why are you asking me about that?"

"Oh," Angelo said, remembering his own magnetic shoes walking around, and remembering, too, the fantastic theories he had developed to account for the fact that a mechanical was walking on the opposite side of the ceiling, and taking

the shoes, quite accidentally, with him. "Oh, no reason in particular. I just thought—"

"It is something, though, isn't it?" Chris said exultantly.

"Certainly," Dr. Emmis said politely. With a sign to Angelo he headed for the door, and, leaving the midget in his dreams of more and more complicated machinery, Dr. Emmis and Angelo headed out of the room and down the corridor.

"If Korkianovich is in command of the mechanicals, as seems probable," Dr. Emmis began, as calmly as if he were delivering a lecture in a medical school auditorium, "then the situation—"

"Is terrible," Angelo put in helpfully.

"It is," Dr. Emmis agreed, "certainly very dangerous. Thanks to the LSD, and to the long confinement aboard the Station, Korkianovich may have become entirely psychotic, at least in such periods as he is in the control of the drug."

"Which is practically all the time," Angelo said, remembering Korky's drinking, and how funny the continuing joke had been, at any rate right up until that second.

"We shall have to find him," Dr. Emmis said, "and interview him. I'm very much afraid that Korkianovich is in a very bad state."

"Doctor," Angelo said softly, "who isn't?"

In Korky's room, the cook-maintenance man was totally bombed. Angelo and Dr. Emmis entered without trouble and saw the big man snoring, sprawled face up on the world's single most unmade bed. "Wait," Dr. Emmis said. "We shall have to rouse him and question him, I'm afraid."

"Sure," Angelo said. A few mechanicals were standing around—sort of an honor guard, he thought—but none of them made a move until he had actually grabbed Korky by the shoulder and begun to shake him.

At that point a mechanical wheeled rapidly around behind him. Angelo, for some reason attached to Korky's shoulder, turned to watch it, turned back to Korky and shook him again, then tried to turn again. The mechanical had two hands that looked like pliers, and, without any hooting at all, it had reached Angelo.

Angelo jumped back, letting go of Korky, but he wasn't quite fast enough. The mechanical's pliers grabbed him in the rear and began to bear down. Angelo shrieked, and this, apparently, roused Korky. He, too, began to make sounds, dull, underground rumblings at first, while Angelo went on sounding like a peanut-whistle and trying to detach the

mechanical, which was holding on as if it had died and frozen in a single position.

Dr. Emmis rushed forward to help, but was pinned down by a ring of the things, which simply stared at him and prevented his motion. Angelo, bucking and leaping, was unable to break free.

And Korky began to speak. Angelo's memory stored the words, though he heard none of them at the time, being otherwise occupied, even as he continued to wriggle on the pliers of a very evil-minded mechanical.

"Fix . . . all . . . nothing left. . . . You put me here, you keep me here, so I get rid . . . I get rid for good. . . . I fix all down there, all. . . ."

Angelo wrenched his way suddenly free, wounded, and half fell into the circle of mechanicals guarding the doctor. One of them was knocked a trifle sideways and Dr. Emmis came through the gap, grabbing Angelo's hand. They stopped for nothing.

But as they left, the mechanicals closing once more around the sleeping, grunting form of Korkianovich, they heard the giant rave on and on, always with the same obvious, horrible meaning.

"You put me up here. . . . You don't let me down, you keep me here . . . all right. Then you die for that. Then you die."

XVIII

"ALL RIGHT," Dr. Emmis said, very calmly, an hour or so later. "Now we're all together, and we've got to decide what to do."

Angelo didn't feel much like meetings, or decisions, or anything at all that required him to sit down. The mechanical had taken a small chunk out of Angelo as a souvenir, and not all the doctor's careful attention to the area was going to make it anything but pretty painful for the next twenty-four hours. He shifted in his soft chair, found no relief, and said, "There isn't anything to do. We're up against a mad genius."

"Genius?" Chris said. The third member of their band, scattering parts on the Comm Center desk, looked up. "He's not a genius; he hasn't done anything we couldn't have done, if we'd gone crazy."

"Speak for yourself," Angelo muttered.

He had outlined for them his trouble in the TIC room, the

confusion of the target scopes, and all the rest. Now that they knew the saboteur, matters were, after all, very simple. They could all stand by and watch him destroy the Earth.

Or they could . . .

Well, it wasn't quite clear what else they could do. "Korkianovich is a dangerous man," Dr. Emmis said. "He must be controlled."

"Sure," Angelo said. "And how are you going to control him?"

"By—"

"By immobilizing the entire force of mechanicals, right?" Angelo said. "It's a nice idea but it can't be done, and if it could be done it would take weeks, and we haven't got weeks. We haven't even got days."

"Meaning?" Chris asked.

"It's clear enough," Angelo said. "Meaning that the arming signal may come through at any time. There's going to be an eclipse, and if I know anything about anything I know that the Asians are going to attack during that eclipse. As a sign from Heaven or something. When they attack, the arming signal goes out from UN HQ, and as soon as that's been done the rockets can be fired."

"But you don't have to—" Chris began.

"No," Angelo said, "I don't have to. But Korky is just waiting to fire those things, and as soon as the arming signal comes through he's going to do just that. We haven't got weeks—we haven't even got twenty-four hours. The eclipse is coming on, and it's going to be a big one."

"The last one," Dr. Emmis muttered. "The final eclipse."

Chris shook his head. "Wait a minute," he said. "You took part of the circuit out of the firing controls, didn't you?" Angelo nodded. "Then he can't fire a thing, no matter what he tries to do. That circuitry can't be duplicated with anything we've got up here—it was set up that way."

"Of course it can't," Angelo said impatiently, "but it doesn't have to. The stuff is on manual—I left it there when I thought we might have to fire on Mars or the moon. Aliens." He shuddered. "I wish we had aliens to deal with —they're less trouble than human beings."

"Especially," Dr. Emmis said thoughtfully, "since we have no notion of whether or not aliens actually exist."

"Anyhow," Angelo said doggedly, "the thing's on manual, which means manual control can fire the rockets as soon as the arming signal is through. And don't think Korky doesn't know it."

"Even if he doesn't, he'll find out," Chris confirmed. "He

knows every lousy inch of this place—maintenance man, he'd have to."

"So unless we can figure out some way," Angelo began, and stopped. The Comm Center door was dilating open.

A giant figure stood framed in it, studying them all. "You are making a plot against me," the giant said.

Angelo began breathing again. "No such thing, Woorden," he said. "Come on in and join us. We're just trying to figure out how to keep from blowing up the Earth."

"What?" the big Boer said. "Mutiny. You are plotting a mutiny, and I will have no part of it. You meet secretly—ah, I called Mr. DiStefano, and no one answered; eventually I came here, and found you. A mutiny. . . ." He shook his head disapprovingly. "The Captain shall hear of this, you may believe me."

"It isn't mutiny," Angelo said. "We're trying to figure out how to stop a mutiny—if that's what you call it."

"But," Woorden began. Dr. Emmis cut him off and rapidly sketched the situation. As he finished, Woorden's eyes were so far open that they looked like small blue grapefruits. "You're serious," he said.

"Of course we're serious," Angelo said. "Korky's going to—"

"Ah," Woorden said. "Yes. Of course. The angels that have fallen . . . yes, I see it all now."

Angelo, along with the others, blinked. "The what that have what?" he said in a high, startled voice.

"The angels," Woorden said very clearly, "that have fallen . . . ah, I see. I am confusing you."

"You could put it that way," Angelo said.

Woorden nodded. He was inside the room, leaning against a wall. "It happened when I was outside—the rotation, you remember?—and I saw something. Only I did not like to talk about it, you understand, because it was not normal. It was unnatural."

Was Woorden, too, on LSD or some hallucinogenic drug? Angelo thought so for a few seconds, and said quite carefully, "There were these angels, and they—"

"Angels?" Woorden said. "No, but that is a poetic way of saying the truth—you understand, at the time, outside, I thought of it as poetic. As if the angels had fallen, as if murder had entered a pure world. . . . Because, you see, there is no war in space. Man has not yet brought his destruction into the calm places of the stars and planets. And so I thought of it, but you understand it was only poetry."

Angelo seized on the decisive word. "Murder?" he asked, swallowing hard.

"So it seemed to me," Woorden said softly. "Two robots there were, and a third whom they were taking to bits—taking to pieces, there in the outside where there is no air. And I was horror-stricken, you see, because the thing seemed to me to be screaming as it died, screaming in empty space where there was no sound. . . ." His voice trailed off. His big hands twitched at his sides, and were quiet.

For a second nobody made a sound. Angelo was remembering Woorden's panic, all the oddities he had noticed, and finding the single reason for them at last. If you thought you heard a mechanical screaming without any sound, no wonder you were nervous. The thing that puzzled him—

"One thing," Chris said, "that clears a few matters up. Korkianovich hasn't got to all the mechanicals yet. And the ones he has got to must recognize each other—some form of coding, I imagine: there are traces in the brain I studied. And the mechanicals that don't code must be taken apart. Cannibalized for parts, the way we planned to do, Angelo, when we jumped that mech."

"That's what puzzled me," Angelo said. Woorden was watching them all with a slow wonder on his face. "The mechanicals taking each other apart."

"Well," Chris said, obviously scaling down his explanation to the needs of lesser men who understood so little about the world of electronic machinery, "well, you might say that a war's started between the mechanicals. The ones who recognize each other are slowly exterminating the rest, and to that extent I suppose you might say that the war is good for us."

"Then again," Angelo said, "I might not. If the mechanicals go to war with other mechanicals, can we survive? They run half the services on the Station now, maybe more, and if they get decimated—"

"Dr. Dental would know," Dr. Emmis said. "As ecologist, she would be familiar with the necessities of life support here. I should think we'd be able to survive without the mechanicals, doing the jobs as we had to, but Dr. Dental—"

"Let's get her here, then," Chris said, and went to the intercom. He clicked it on, turned to Angelo and said, "I hope you see that this settles the matter of those antennae, too. Mechs, clipping them off, taking what they needed—the monsters!" Angelo had no reply, but he hardly needed one. Chris was back at the intercom instantly, sending out a call for Juli. As an afterthought, he sent out a call for Captain Zugzwang. "We all ought to be here," he told the assembled crew, "in order to plan our next move."

Juli arrived in about ninety seconds, freshening up the meeting, Angelo thought, as if she herself were the entire life support of the Station. "What's wrong?" she asked, but there was no immediate answer. Instead, the intercom resounded with the pained, double-volume voice of the Captain.

"The meeting will take place on the bridge," he announced. "Your call acknowledged, but all meetings with the Captain take place on the bridge."

"Sure," Angelo muttered.

"It is only proper," Woorden said. "We should go to him, as Captain; he should not be having to come for us."

With a collective sigh—and Juli's voice asking, "Won't somebody tell me what this is all *about?*"—the party started for the door. They reached it, opened it—and heard a hiss and a clang.

The pressure doors had shut, sealing the ship into twelve different sections.

They were trapped.

XIX

"NOW," Angelo said sadly, sitting on the corridor floor near Juli, "now I can tell you what's been happening. Now we have the time—all the time in the world."

Woorden was arguing with Dr. Emmis about sending a crew member out to burn through the pressure doors and get to the Captain. "It is impolite to remain away from the bridge when we have been requested—"

"Except that nothing's going to burn through those pressure doors," Dr. Emmis said, "and there are undoubtedly mechanicals waiting for us even if we find something that could."

"Nevertheless—" Woorden began. Angelo turned them off in his mind, and began to explain to Juli.

Time passed. "Then the mechanicals, under Korky, are taking over the Station?" she asked. "But that—that can't be done. I mean, we can't possibly survive if the doors stay shut, which might be what the mechanicals want, or Korky himself, if all this is true."

"It's true," Angelo said. "It isn't a nightmare, though we all wish it were. Now suppose you tell us why we can't stay alive here."

The others were clustered around. Juli took a breath. "Smell," she said.

Angelo sniffed. So did the others. "Smell what?" Angelo said.

"The air," Juli said. "It's stale. And it's going to get worse."

"My God," Dr. Emmis said. "You're right. But the pumps —they can't stop the pumps—"

"They have," Juli said flatly. "When part of the Station's sealed off, the pumps automatically stop for that part: the sealing's only meant as an automatic reaction to holing, though of course there's a manual control. The pumps are stopped, now, and we've got about half an hour's worth of breathable air."

"The other sections—" somebody said.

"We may be the only ones holed," Juli said, "or the only ones the mechanicals sealed off as if we *were* holed. Every other place may be safe, pumps working and all. But in here, we have about half an hour."

Woorden moaned. "I can't—it is impossible—breathing . . ." he gasped out. Dr. Emmis went over.

"Claustrophobia," Juli said. "Reacting now as if there weren't any air."

"Reacting the way we all will be," Angelo said, "in about half an hour. Unless—" He stopped.

"Unless what?" Juli said.

"Suits," Angelo said. "Near the main lock. If we can get to them—"

"How?" Juli said. "In here, the mechanicals should be repairing the hole—should have done the job already. But there are no mechanicals left even to think about repair, and remember that they can't know whether or not we *are* holed. No, they're waiting for us. Even if we could figure out a way to burn through the pressure door, there'd be mechanicals waiting on the other side."

"But—" Angelo stopped. Woorden was still moaning faintly, while Dr. Emmis talked softly to him.

"There is no answer," Juli whispered. "None."

Angelo took a quick look around, then spotted Chris Shaw at the open door of the Comm Center. He waved Chris over, saying at the same time, "He's going to help us out of this. Wait and see."

Chris came over, knelt down and asked, "What's the trouble?"

"No trouble," Angelo said cheerfully, "unless you want to count the fact that we're all going to die in about twenty-seven minutes."

"And there's nothing anyone can do," Juli repeated. "Nothing."

"There," Angelo told her, "you're wrong. Listen, Chris. Can you take your suit, go out through the Comm Center lock, get the other suits at the main lock and then come on back—and do it in one hell of a hurry?"

Chris grinned. "Sure," he said. "Twenty-seven minutes? Nothing to it."

Angelo held up a warning hand. "Don't cut it too fine, now," he said. "Let's not try for exactly twenty-seven minutes—nearer twenty-six now, anyhow. Just go, and get back."

"Right." And the little man was gone.

Juli stared. "But—you mean—"

"I mean there is a way out," Angelo said. "I remembered the air lock here, and if Chris can go around outside, in his suit, and get ours from the main lock, we all ought to be okay. There's always a crisis, and there's always an answer. All you have to do is find it." He wished he felt as cheerful as he sounded: the problem of the Station was still with them, and suit air didn't last forever. But keeping Juli happy was, he told himself, obviously worth doing.

Time passed. According to Angelo's watch, ten minutes had gone by when he began to notice a difference in the air, twelve minutes when Dr. Emmis said something about it. "But that's too soon, isn't it?" the doctor asked.

"Not in this temperature," Juli said crisply. "The copper coils in the walls are being used to overheat the section. We're running out of air faster than we thought. We may have as little as five minutes left."

The silence that fell was as palpable as velvet. The velvet lining, Angelo thought, of a nice, expensive coffin.

One minute went by. Two. Three.

Woorden was reciting something that sounded dimly Biblical. Juli, Dr. Emmis and Angelo were watching the Comm Center air lock without moving, almost without blinking.

Four minutes.

And the air lock remained shut. Chris would come back too late, Angelo thought, unless the lock began to open without delay.

The lock opened.

Chris Shaw, loaded to the eyebrows with suits, came stumbling in. "New world's record," he said, and couldn't understand why everybody else was crying.

XX

IN THE suits, the little party looked around at the shut corridor. Woorden, his voice strange and metallic in the speakers, said, "We shall need a commander. I myself am clearly unfit for that post."

Juli's voice said, "Angelo, you take over. This was your idea."

Angelo said, "But—" and stopped. There wasn't any other choice; besides, he did have an idea or two. Someone had to report to the Captain (he told Juli off for that duty, sending her to the Comm Center intercom), and then there was the idea Woorden had given him a few minutes before.

"Chris," he said, "signal UN Security on Earth, and send the following message—"

"We haven't the power," Chris said. "I told you—"

"You've got a mechanical's brain," Angelo said. "The things get power from the pile and manage to use it. Hook the brain up and tell it to draw enough power for one message. It's the last one we'll need to send."

Chris thought it over. "It might work," he said. "Once."

"That's all we need it for," Angelo told him. "Now, here's the message. . . ."

Chris stayed behind to send it out. All the others got together to go after Korkianovich. Dr. Emmis reminded everyone of the mechanical that had savaged Angelo, but Chris, in a parting shot, told them, "As far as I can figure it out, the mechanical loses power when you lift it off the ground. If it's out of contact with those copper wires, it has nothing to sustain itself on: a self-aware job like this, with all the new circuitry, can't keep going on a power pack."

With that much encouragement, the group left. Chris, meanwhile, was tapping out the message, using a code contact as the one which required the least possible power. The message puzzled him a bit, but meanings weren't his affair. It puzzled UN Security, too, until someone remembered that Angelo DiStefano had been raised in a religious household.

Suggest you follow normal Sunday routine. Find Knox excellent communicator but regret his psalm singing sense of sorrow. Also weight a problem. Optimum 141 but often runs higher, between 5 and 7. That is all for now. Say a prayer for us all.

By the time UN Security had managed to find a copy of the Knox translation of the Bible, and locate in it Psalm 141, verses 5 and 7 (". . . All hope of escape is cut off from me, none is concerned for my safety. . . . Listen, then, to my plea; thou seest me all defenseless."), the rest of the party was well on its way. Juli had found communications cut off by the sealing of the section, and so she went around the outside of the Station toward the bridge lock; the rest of them headed for Korky's room. Woorden kept looking over his shoulder, apparently expecting to see more screaming mechanicals, but none were visible. This fact did not cheer Angelo, who assumed that the entire mechanical crew of the Station was going to be waiting for them when they hit Korky's place. He didn't mention this fact, however. Dr. Emmis and Woorden had enough trouble. And Chris, he told himself, would be along in a minute. Everybody, Angelo felt, was panicked, and he found himself growing just a little proud of himself. After all, he'd come up with the ideas, he was being calm and cool, he was—

What he was, he realized slowly, was floating. He'd put the spacesuit on barefoot, since his own shoes were still missing, and the magnetic cleats that came with the suit had just been forgotten. For all he knew they were still lying in the corridor near the Comm Center. On top of that, as he looked down, he noticed that the lifeline which connected all of them was not secured.

He was just calm and cool enough, he realized, to make a complete idiot of himself, and, just possibly, to float away helplessly into the void. The suits were supposed to have small jets, but the jets were powered by oxygen from the air supply, and the choice of air or motion was not the easiest one in the world to make. On the other hand, Angelo began settling down to a nice, long, futile argument with himself. . . .

Woorden, stalking in the vacuum like God surveying Creation, reached up as if he'd been practicing the motion for months, grabbed Angelo by the ankle, and hauled him down. Feeling slightly less superior, Angelo attached the lifeline, and the party continued. There were, until the air lock nearest Korky's room was reached, no more mishaps.

Except that Chris hadn't arrived. Probably, Angelo thought, he was having trouble rigging matters to send his message.

Shortly after that thought, Angelo became too busy to have any thoughts at all.

Opening the door of Korky's room was enough. A mechanical, the only one in the room, started for Dr. Emmis. Working as a team, Angelo and Woorden got hold of the monster and lifted it off the ground. Resistance stopped at once. It was, Angelo told himself, a very simple way to immobilize mechanicals, but what did you do, he wondered, when your arms began to come off at the shoulders? Mechanicals were not the lightest things around. Woorden held up his end (the head) with stolid, uncomplaining patience. Angelo hung on to the unmoving legs and wondered how long he could hold out.

Dr. Emmis, meanwhile, was bending over Korky. With a full space rig on, the doctor couldn't even take a pulse, but apparently visual inspection was enough. After a minute or so (or perhaps, Angelo told himself, four or five days) the doctor's voice came through the earphones:

"He'll be out for hours yet, and there's nothing we can do to speed up recovery. Can't even bring him somewhere else: there's no suit for him." Angelo, recalling the first brilliant burst of orders, cursed himself savagely for not telling Chris to bring an extra suit. But he couldn't think of everything.

"What can we do, then?" Woorden asked easily.

"If we bring him through the corridors, some mechanical will be sure to spot us," Dr. Emmis said. "If we leave him here, we run the constant danger that he will step up the war—or that the arming signal will come through."

It was, Angelo thought, a very neat impasse. There wasn't a solution in the book—until Woorden offered one.

"Kill him."

Dr. Emmis looked up. "What? Do you mean to suggest that I should—that I should kill this man? I, a doctor? Do you mean—"

"I mean that there is no other solution," Woorden cut in. "The answer is obvious; if it is distasteful, then that is something else which must be lived with. But, yes, I mean that you should kill this man. It will save lives—ours, and the lives of many upon the Earth. There can be no discussion."

"Now, wait a minute—" Angelo said, and stopped. What, after all, was there to say? Woorden's exposition had been simple, logical, and just about unanswerable. On the other hand, killing a man in cold blood . . .

"I would do it myself," Woorden said, "except that the mechanical would touch ground and warn the others, you understand. But it must be done."

"Not—no," Angelo said. "No."

"But—" Woorden began.

"I'm the commander here," Angelo said, playing to Woorden's weakness. "My order is that we carry this heavy monster out to the air lock and toss him into space. It's the only way we can get out without his touching ground."

"And then?"

"And then," Angelo said, to Dr. Emmis' evident relief, "we go to the bridge. Join the others and see what ideas everyone has."

Woorden made a slow sound of agreement, and the mechanical was carried out the door, over to the air lock, and through it. Angelo was sure he couldn't make it—and, in fact, he wondered later how he had.

But the mechanical was a speck, dwindling as it drifted off into empty space, when Dr. Emmis climbed up beside them.

"To the bridge," Angelo said. They started. Five seconds later Woorden stopped and signaled to them to go on, pointing to his wrist and making a circle. "I'll join you later."

Authority, Angelo told himself, had failed. And there was nothing else to do, he went on, except to live with the fact. He couldn't fight Woorden, couldn't change his mind. He had to accept responsibility for the fact that he and Dr. Emmis went on toward the bridge, while Woorden went slowly back . . .

To commit a murder.

XXI

ON THE bridge, matters were very busy indeed.

Angelo and Dr. Emmis entered to the sound of hysterical screaming. Juli was backed against a bridge wall, holding, for some strange reason, a section of flagpole in front of her, and screaming unintelligibly at the Captain—who sat five yards away, doing nothing whatever beyond staring at her. "What happened?" Angelo asked instantly as he took off his helmet, the only immediately separable part of the suit. The Captain wasn't wearing a helmet, and neither was Juli; her screams had simply been loud enough to go straight through the protective glassine envelope of Angelo's. Behind him, Angelo heard the stir of Dr. Emmis removing his own helmet. Juli had shut up, and the bridge, where, obviously, there was enough air for a while at any rate, was very quiet. In a sort of hush, Angelo asked once more: "What happened?"

He was, he realized, very much relieved that he hadn't had to stay with Woorden—that, in fact, he was facing a situation which promised to be so busy that he didn't even have time to think about Woorden. If the man was really going to commit a murder (and Angelo put any doubts of that down to wishful thinking), then Angelo himself was responsible: he could argue all he liked with himself about not having been able to stop Woorden, but the sense of responsibility wouldn't blow away so easily.

Here, Angelo thanked his God, was a new and different situation. Juli had turned toward him with wide eyes, just the faintest hint of tears lining the lower lids. In a voice that was made up of equal parts of tragedy and surprise, she announced: "He tried to rape me."

Angelo looked at Captain Zugzwang, sitting behind his desk. The Captain, apparently beyond speech, merely shook his head. "But—" Angelo began, and then started over. "I want to protect you," he said. "You know that. But you'll have to tell me just what happened."

"I told you," Juli said, in somewhat louder tones. "He tried to rape me."

Angelo swallowed hard. "The—the Captain?"

"That's right," Juli said. "I didn't even realize anything was going on, until—"

"Yes," Zugzwang said with sudden firmness. "Until what? If someone will kindly tell me how it is possible to—even to threaten such an act, while in a spacesuit—she is still in her suit, and . . ." His voice trailed off. "She began to scream. I have no idea why." The chair circled, and Captain Zugzwang presented a broad, uncommitted back to the argument.

"But he was going to rape me," Juli said loudly. Dr. Emmis took a hand at this point, a hand in what Angelo began to think was an unnecessarily complicated game.

"What gave you this idea?" the doctor asked mildly.

Juli stared him straight in the eye. "I could tell," she said. "When I came in here, he had only one thing on his mind. I mean, it's obvious. The sex-suppressants have given out—"

"Yes, I know," Dr. Emmis said. Juli blinked.

"You do?" she asked. "But you never . . ." She caught herself up. "Anyhow, when I came in here, I could tell at once. But I had a duty to perform. I gave him all the information—"

"All of it?" Angelo cut in.

"All," Juli said dramatically. "Everything. Without any

exceptions. And then I knew there was no escape, and I grabbed this and then you came in. But I—"

"Gave me all the information," Captain Zugzwang said, without turning to face them. "Ah, yes. All except one fact."

Angelo took a breath. "Which is?" he asked.

"Which is this," Zugzwang said. "How does one rape someone in a spacesuit? I am still confused by this. If someone will only explain—"

The sex-suppressants, Angelo saw sadly, were getting more and more to be Juli's only possible subject. In a way, it was wonderful; but couldn't it have happened, he asked himself, at a somewhat more convenient time? No, he realized: the running out of the suppressants had the same cause as everything else—the eight months aboard. "I'll explain everything I can, sir," Angelo said, and began to do so, filling in the Captain on details of the still continuing war, Dr. Emmis' judgment on Korky (to which Dr. Emmis added a firm, no-nonsense agreement), and Woorden's leaving the company temporarily. Captain Zugzwang came to the same obvious conclusion as Angelo himself still harbored, and there they were, he thought miserably, back with his responsibility, back with everything he had tried to get rid of. "There wasn't anything else to do, sir," he said, hoping that this would sound more convincing to the Captain than it did to him.

It didn't. "You allowed this man to go off and commit a murder?" Zugzwang asked. "On this Station? Mr. DiStefano"—the formality, Angelo knew, boded very ill indeed—"I have only a few words for you—"

"But it had to be done," Dr. Emmis broke in. "Better that one man should die than that the entire planet be destroyed."

Captain Zugzwang turned glittering eyes on the doctor. "You may well say so," he began. "But that this one man be murdered—it is not the same. Murder cannot be countenanced. In any case, I am not certain that the situation—"

"It's awful," Juli said. "It's terrible. And every day all you —you *men* lose control of yourselves more and more. . . ." She waved the flagpole blindly, nearly hitting Dr. Emmis behind the left ear. "Something has to be done!" she cried.

"Not murder," Captain Zugzwang said firmly. Angelo didn't really feel like defending himself—there was, after all, so little to defend. But Dr. Emmis continued to battle.

"The man is in a psychotic state," he said. "Incurable, as far as current medical knowledge goes. He has been driven to hatred of the Earth because of our long stay here. He

had rerigged the mechanicals, tried to kill us by shutting us off from the rest of the Station—and at any moment he may succeed in blowing up the Earth!"

"Nevertheless—" Zugzwang began, and then broke off as one more figure entered the room via the air lock. "Murderer!" he shouted. Woorden, removing his helmet slowly, asked:

"What is all of this? What sort of talk—"

"We all know what you did," Angelo said slowly. "Maybe it had to be done, but there was time to talk it over. Committing murder—"

"Murder?" Woorden said, honestly amazed. "*What* murder?"

The explanation took time. Tangled as it was by the threads of several different arguments, it was only very dimly and very slowly seen by the rest of the group. But Woorden's stubborn, patient talk finally got the notion across.

"I didn't kill anyone. What would be the sense in that: to kill as if a man were God, before we had all talked, and before we had come to a solution? No. But I did a better thing. The mechanicals cannot be allowed to sabotage the space boat—the launch by which we were brought up and by which, God being willing, we shall return. I detached it and put it in an orbit around the Station, you understand."

Angelo remembered later objecting, horrified, "But now—"

"But now," Woorden said calmly, "if we need the boat, you see, we can float out to it—the distance is less than a thousand yards. The orbit will be constant, I should guess, for six months—and that, certainly, is more time than we shall need. But if the boat remained attached, you understand, the mechanicals might damage it for good. Then it would be useless to us in case of need." And he had looked around at the faces of the others, remembered, obviously, the tangled argument on which he'd entered, and added, "Perhaps I should have explained myself to the doctor and to Mr. DiStefano. But it was all very clear to me; you understand how that can be."

They understood, and understood—Angelo, at any rate—that Woorden's action had been obvious, necessary, and quickly, neatly done. There was, apparently, something to say for a mind obsessed with protocol: when it acted, it forgot nothing. Unlike Angelo's own mind, which seemed sometimes to be a construction with which a colander might be favorably compared. In fact—

In fact, he realized, he had forgotten all about Chris.

"Where's Chris?" he asked, and discovered that everyone else had forgotten, too. Only Juli had an idea, and somehow it didn't sound very practical.

"He's lurking somewhere," she said darkly. "Waiting for me. Even a midget, once the sex-suppressants are gone . . ." Her voice trailed away with a shuddering and thoroughly enjoyable horror. Angelo looked at the others, and shrugged.

"I'd better go and find him," he said. With some resignation, waiting, in fact, for the sentence that never came—"Oh, you don't have to go; I'll go and look instead"—he got his helmet on and went out the air lock again.

Being out in space alone was a little disturbing. If he started to float, there was no one to rescue him. But his cleats were fastened on now, and he made the trip back to the Comm Center without difficulty. Entering at the air lock there, he stopped short in a kind of horror.

Chris stood within six feet of him. But between Angelo and Chris there was what seemed to be a solid wall at first, and later turned out to be something even worse.

It was, Angelo saw slowly, a single incredible set of spark gaps—electricity loose at what must have been fantastic power.

And it was to Angelo's immense credit, though he never quite thought of it that way, that he didn't simply tip his helmet, turn around and walk out. The thing was, obviously, capable of making small fried piles of ash out of not only Chris Shaw, but anybody else who began to play around with it.

XXII

THE sparks were making loud sizzling noises through the helmet, but Angelo switched his intercom on, put it up high and asked, "What can I do? How do you turn it off?"

Chris's reply came through static, crackling and everything else in the book. "Tried . . . to turn off. . . . Been staying out of its way, trying to reach . . . switches your side of the gap. . . ."

Angelo shouted, *"Where?"* There were about six thousand switches within handy reach. He stared around at them.

"Fourth row from . . . bottom . . . six and seven from right . . . your right . . . flip down toward bottom . . . then third row three and seven . . . then . . ."

It was quite a list. Angelo slapped panels, flipped switches, pushed a button or two—and the wall disappeared. Static,

crackling, and the incessant flashes of light went with them, and Angelo supposed there was a smell of ozone in the room, though inside the helmet he could smell nothing but himself. That, after exertion and fear, was enough.

Chris dragged himself over to the Comm Center desk, turned and asked Angelo, "Everyone on the bridge?"

"All but Korky," Angelo said. Chris, obviously out on his feet from the little dance he'd carried on with the electricity, slapped four panels, turned a dial and nodded.

"Okay," he said. "Okay, we can receive. We can't send. Board's burned out—have to be after that last display."

"Did you send the last message?"

"Sent," Chris said. "Then—some kind of overload, I don't know, maybe the mechanicals—thing blew up on me. Angelo, you take care of—"

He fell to the floor. Angelo, with a sigh, picked him up, slung him over one shoulder, and began the trip back through the air lock, outside on the skin of the Station, back to the bridge.

"Exhaustion," Dr. Emmis said. "I don't wonder at it in the least, if what you tell me really happened."

"No," Angelo said bitterly. "I dreamed it up. I've been under a strain and I'm hallucinating."

Dr. Emmis turned a white face on him, his hands still holding little Chris steady on the bridge desk. *"Don't joke about that."*

Abashed, Angelo nodded. "You're right. But—it happened."

"He may come out of it," Dr. Emmis said. "In fact, he might keep going on adrenalin for some time—you'll notice he didn't keel over until it was safe for him to do so. His body will get as much rest as it absolutely needs now—but he may come out of it and be good for several hours before he goes under again; he'll need a long rest then, and as much help as is medically possible."

"That's right," a voice said, and Dr. Emmis looked down to see Chris, open-eyed, looking right back.

"I didn't quite expect so quick a recovery," the doctor began.

"I'm a little man," the midget told him, quite without rancor. Apparently, Angelo told himself, the incidents of the past few days had proved to Chris that Chris was, in the ways that counted, quite a big man indeed; he wondered, in fact, if Chris had climbed into bed with the redoubtable and incessant Juli, a thought that wouldn't so much have

skimmed the surface of his mind a week before. "I recover fast: there isn't so much of me to recover."

"I—suppose so," Dr. Emmis said faintly.

Chris turned to face Angelo. "What I did, setting up in the Comm Center before I went out on you, I set everything up so inside-the-Station broadcasts can be made from the bridge. Thought we might need that."

"Great," Angelo said. Captain Zugzwang looked stern, stuffed and acceptant. Chris gave them both a sidewise grin.

"You may not think the next part is so great," he said. "I don't know whether the last message—yours, Angelo, to UN HQ—got through. No acknowledgment. Could have missed it, once that little display started, but there's no certainty, either way."

Angelo said, faintly, "Oh." There was a little silence.

"Anyhow," Chris said, "let me set up the contact from this end. There's a repeater behind one of the side panels here, if I remember correctly, and I think I do—yes, Doctor," he said to the watching Dr. Emmis above him, "I'm working on adrenalin. But the work has to be done. This is no time to be saddled with an unconscious communications man." He swung off the table, avoiding neatly the doctor's protecting hands, and trotted over to a side panel, which he opened. Woorden made a noise of protest, and began:

"The Captain must give permission—"

"This is an emergency," Chris said over his shoulder, busy with panels. "We can go back to the regs and rules some other time. Sorry, but that's the way the little Station bounces, Mr. Woorden."

Woorden looked gray and shocked, but made no reply. Chris, humming rather raggedly, continued to work, and for a time nobody else said anything. Then Captain Zugzwang, very quietly, threw the bomb.

"There is only one solution to the problem as outlined," he said.

Angelo, the obvious pigeon, took the bait. "What is it, sir?" he asked.

"The Station must be destroyed," Captain Zugzwang said flatly, "and all of us with it. I'm sure you can see why there is no other answer."

"But—" Angelo and Dr. Emmis began at once.

"There is no other way out. The Station must be destroyed, as can easily be done, by someone breaking through the circuits which guard the arming circuit, since this causes automatic detonation of the missiles aboard the Station. In

order to break through those circuits, we must be on the Station. My solution, gentlemen, stands."

His voice never rose, not a quarter-decibel above the calm, sensible tone with which he'd begun.

Angelo stared. So did everybody else.

There had to be another answer. But . . .

XXIII

THEY discussed it. They argued with it. They suggested, pleaded, revolved ideas, threw out new ones, and, in general, got absolutely nowhere. Woorden alone stayed out of the discussion, standing, his arms folded, with an absolutely impassive look on his big face. All the others frantically searched for new solutions.

And found none. Chris, meanwhile, was setting up the link between Comm Center and the bridge, and, when he had it set up at last, a blast of sound hit the room like a new explosion. Everybody jumped, but it was only a voice.

". . . forces identified as the Second Asian Land Army"—*Here it comes,* Angelo told himself, *here we are, hours from the eclipse, and they've started, and it's too late*—"have commenced an attack against Peking. A revolt in Asia appears to have begun, led by elements of the so-called Popular Party, against the reigning Technocrats. Much information is, as yet, only rumor, but the main lines appear to be quite clear, and its meaning, too, is quite clear. For an analysis of what this latest Asian news means to you, and to your loved ones, keep tuned to this station where David H. Ross will present a panel discussion. But first, a word about Flake Rotors. Honestly, now, gentlemen, don't you sometimes find yourself—"

The thing was tuned down, and Angelo found it possible to say something and be heard. He chose his speech carefully. "What the hell was that?" he asked.

"That," Chris said, "was a radio station. Earth. Nebraska, or maybe Ohio. I can't pinpoint them any closer, not at this distance. Want some more?"

"If that news is true . . ." Angelo began, and then nodded quickly. "Yes, I want some more. A lot more."

"That decision," Woorden said calmly, "is for the Captain to make. Captain Zugzwang, may I request you to—"

"More," Zugzwang said shortly. Chris fiddled with his rig. Another voice came through, this time a high-pitched British one.

". . . Everyone has been taken by surprise in the aftermath of this latest move by an Asian army group. At Ten Downing Street, the Prime Minister has, as yet, refused to issue any statement on the Asian 'revolution,' as it is already being called, but this reticence cannot last forever. Sooner or later . . ."

Another voice. And another, and then another—until even Angelo, well acquainted with the abilities of public communications to create events that had not, would not, and could not actually happen, was convinced. The Asians had attacked, all right—but they had attacked Asia.

It made sense, after the fact: a rule-by-science was all very well if you understood what was going on, but somewhere in the peasant population which had essentially ruled the mainland of China and neighboring Asian countries almost from the dawn of history, was a deep distrust of scientists. The ravages of Compound Delta had done that, once and for all. Sooner or later (Angelo winced at the clichés, but had no time to pretty them up), a revolt was inevitable. It had been discussed as a theoretical possibility, he knew, throughout the Western Intelligence network, and probably through the African as well, but it had never been taken quite seriously.

Now, with the peculiar logic of history which makes events happen and then convinces the participants and spectators that no other event could possibly have occurred, the theoretical possibility had become actual.

The commentators were still talking, as Chris shifted from station to station, in six different languages, all over the Western world. "And what does this event mean?" someone said in a portentous American voice, well-filled with the knowledge that its possessor owned all the facts anyone would ever, ever need. "It means a great many things, for us and for our children—and, as well, for Asia." It was nice of him, Angelo thought, to add Asia, where people were doing the actual fighting and dying. Very polite of him to condescend so far to brute fact. "There, its meaning is clear: either a new light of understanding will bloom forth in the Asian complex, or a wave of war-induced hysteria will succeed, carrying with it the awful threat of nuclear warfare. Which of these possibilities supervenes is in the dark crystal ball of the future, but—"

"Wait a minute," Angelo said. He had an idea. It wasn't a complete idea, but he needed to toss it out; maybe somebody else, somebody quicker and smarter, could finish it for him.

Dr. Emmis said, "What is it?"

"If we've got to destroy the Station, Doctor—and don't object, because that may be our only way out—then we've got to destroy it directly over Peking, during the eclipse. We have enough eclipse-time to make that work out. They're using that eclipse as a sign of Western decline, and don't think they plan to stop with Peking. They'll go right on—whichever party wins—now that they're actually committed and in motion. That much is clear." He winced again at his resemblance to the commentator, but it *was* clear, by God: Intelligence had taught him that much, if nothing more. "If the Station blows—they've got a new sun. The sign reverses itself. The movement falls apart, maybe for good. It's the only way."

"Signs and symbols," Zugzwang said in a withering voice, but Dr. Emmis cut in.

"Angelo's right," he said. "People don't think logically—especially people under strain. Believe me, if the situation's what it sounds like, and if Angelo's assessment of the eclipse is right—and it ought to be, that's his field—then the rest of it follows. Any decent doctor's a jackleg psychiatrist, whatever that term means nowadays; as the nearest thing we've got here to an expert on people and the way they act, I back Angelo."

"Ah," Captain Zugzwang said, very slowly. "So? Then we have still another, and a more urgent reason for destroying the Station. If it will truly save the Earth . . ."

To everyone's flat surprise (but, then, it was a surprising day, Angelo told himself, to put it very, very mildly), Woorden cut in with what was almost a scream. "But we can't! We can't destroy the Station! That leaves—" He swallowed. "That leaves only the Africans up here. Only the Africans—and we can't leave them. You don't know them, you don't know what they can do. But I do." His voice was growing sly, sinking to a strained, horrified whisper. "The Africans, I tell you, they can do anything up here alone. To leave them in control of the orbital world, leave them up here with their missiles alone . . . it cannot be done. *It cannot be done.*"

Dr. Emmis snorted. "Woorden," he said, "and I ought to address you as Lieutenant Commander, I know, except that your speech has forfeited claim to the protocol of titles. Woorden," he went on as Woorden went white, and stared, "you appear to think that this is a decision you can make. Let me tell you, it isn't a single-handed decision. We're all involved in it, and no matter how much you want to go it alone—"

And now it was Juli who, still clutching her flagpole, said tensely, "Wait. I see the obvious answer. The answer to everything."

"Wonderful," Dr. Emmis said dryly. "Now, if we could only communicate it to the human race, which has been searching for it all these thousands of years . . ." He gestured at the intercom, which, still shifting from station to station, had run into the only one not preoccupied with news: a cataleptic Swiss station which was playing classical music just as it did every day in the year, and had reached the ninety-fourth symphony of Haydn.

"I'm serious," Juli said. "Single-handed—that's the clue."

"All right," Dr. Emmis said, "the clue to what?"

"The Station has to be blown up. All right." Juli gestured with the flagpole. Dr. Emmis, cautious now, ducked. "But we don't all have to die with it. Only one of us has to stay. The rest can get off in the space boat."

There was quite a long silence. Then Captain Zugzwang cleared his throat. "Very well," he said. "I order you all to leave. I shall perform this task."

"But, Captain—" Angelo began.

"If the Station is destroyed, I shall be responsible," Zugzwang said with a surprising accession of humor. "In this service as in all others, the man responsible for the loss of equipment must pay for it, correct? I have no ambition to pay for a new Orbital Station: I shall remain behind. It strikes me that this is, in all probability, why sea captains go down with their ships."

"But you won't—the idea's ridiculous—" Dr. Emmis sputtered.

Zugzwang remained calm. "I have given an order. It shall be obeyed."

"Captain," Angelo said, "you can't give an order like that. We have to decide who's best fitted, the Intelligence officer, for instance, to do a job like—"

Very, very quietly, Dr. Emmis, recovering, tossed his bomb.

"Let Korky do the job," he said.

Everyone began talking at once.

XXIV

"BUT he'll die," Angelo said in agony.

"He wants to cancel out the Earth, and all of us," Dr. Emmis said, just as quietly as he had spoken before the

explosion. That first rage of voices had quieted, and Angelo and the doctor could be heard. "He cannot be cured. The Station must be destroyed—and cannot be destroyed from somewhere else, as is obvious: we're amored against that, with the various defense missiles, and so forth. If it must be destroyed from inside, then why not allow Korkianovich to perform not only a necessary but a patriotic act? There is no other act he can perform which does not lead to the destruction of a good many other people."

"Even so—" Angelo began.

"It is not murder," Dr. Emmis said. "Korkianovich will sacrifice himself, doing a job that needs to be done. As any of us might. The difference is simple, and the difference is this: that we are all potentially valuable to Earth, when we return. Korkianovich, to put the matter brutally, is not—not any longer. By accident or design, he has canceled his own value; this is the only valuable act he can perform, and the last one."

"Maybe we all ought to stay," Angelo said miserably.

"Don't be silly," Dr. Emmis told him crisply.

The discussion took an hour. It had only one possible end.

As the hour closed, Chris Shaw said, "We can't just tell him to destroy the Station—he wouldn't obey. Simple as that."

"He would obey one order, properly given," Captain Zugzwang said. "On this Station, order is a constant: his obedience would remain."

Dr. Emmis appeared to think it over, while the rest watched him. At last he said, "Yes: one order. Just one. That would get through. He'll be up and around soon, so you can reach him on the intercom." The Captain looked relieved. "All the same," Dr. Emmis went on, "he will *not* obey an order to destroy the Station. The order is going to have to make sense to him. If it does—just once—he'll obey. I guarantee that."

And a new discussion started, while the intercom waited, while Chris's rig continued to pull stations out of the revolving Earth, news, interpretation, analysis—and, from the center of Switzerland, music. It was the Grieg *Piano Concerto* when Captain Zugzwang said, "We are all agreed, then? If we tell him to go in and change the arming-circuit code, he'll go in, and set the Station off."

"Well," Chris said slowly, "yes—but there are difficulties. Suppose the word comes through from Earth to fire the

missiles? Suppose it comes through—automatically. He can fire the manual, not the TIC stuff, because Angelo's got a piece of that in his pocket. And suppose a message comes through to change the signal? He'd know we were kidding."

Angelo said, "He wouldn't notice the missing piece. Not from what I gather about this—this disease of his."

"He will see gestalts," Dr. Emmis said. "Fine detail of that sort will escape him. But Shaw is quite right: we will have to destroy the arming-signal indicator, the reception-to-Earth in the Comm Center, and the manual controls."

"My God," Chris said in awe. "Against the mechanicals?"

"No," Dr. Emmis said crisply, "with them. We'll very graciously accept their help."

Alone, Chris went off to take care of the circuits controlling reception-to-Earth. He wept a little, but the impending destruction of the entire Station helped to mitigate his sorrow. "With the arcs gone, that ought to be simple," he said. "No mechs in the Comm Center—I don't know why."

"If you run into trouble," Angelo said, suiting up along with the others, "give a shout."

"I do not," Chris said, in a fair imitation of Dr. Emmis, "intend to remain silent." And he was gone.

For the rest . . .

"At least Chris programmed the computer," Juli said. "Our mechanicals—the ones that haven't been fixed—are now programmed to fight back against other mechanicals. It ought to be fun to watch, in a way."

"Sure," Angelo said. "Fun. We've got to fight the things, and manage to destroy the arming-signal telltale, the manuals—and nothing else. It sounds like a nice job."

"Lovely," Dr. Emmis said dreamily.

Woorden said, "You leave the manuals to my work, Mr. DiStefano—Captain Zugzwang. I shall take care of matters there."

"Fine," Angelo said. "And we'll rendezvous outside the TIC room in—in twenty minutes. That eclipse is getting closer."

"We can tight-beam a broadcast into the bridge, make it sound as if Captain Zugzwang is delivering the orders from the bridge; right, DiStefano?" Dr. Emmis asked.

"Right," Angelo said. "That's Chris's work, too. Man deserves a medal." He paused. "Well—let's go."

And they went off, a little band of brothers, and one insistent sister. Out the air lock, back into the TIC room, all without difficulty. The metallic sounds of mechanical against

mechanical were evident even through the helmets, but nothing else seemed to be happening.

Angelo dilated the door. Six mechanicals came charging in.

And the war, Man vs. Mechanical, had begun at last—though not exactly in the terms anybody had ever dreamed of for it.

The mechanicals were armed with pliers, pincers, brazing tools, and anything else that came (Angelo thought irrepressibly) to hand. The four combatants were armed with pistols, which worked beautifully against other human beings but had a tendency to result in nothing more than a dull *clang* when applied to mechanicals.

But human beings, Angelo told himself as a fierce-looking mechanical waving a cutting tool (left hand) and a brazing tool (right hand) came at him, human beings could think. That was their advantage.

It didn't seem enough. The mechanicals were after them, and this time there was no quarter. They'd surrounded Juli, who was screaming in high steady whoops, and they were closing in. Dr. Emmis was keeping them at bay by swinging Juli's flagpole, which he'd managed to rescue when it became obvious that Juli was not about to use it, but Dr. Emmis couldn't last forever.

And the arming-signal indicator remained intact. Angelo sidled toward it. One good blow would do it. He approached it, changed direction suddenly, and headed for the mechanical who stalked him. The mechanical swung . . . and Angelo, changing direction again, missed destruction by about half an inch.

The arming-signal indicator was not so lucky. Angelo noticed this fact with satisfaction and tried to go to Juli's aid. He went four steps, and found four mechanicals coming toward him from all directions. Angelo tackled one around the feet and managed to bring it off balance enough so that—in the Orbital Station's brutal and somewhat uncalculated one and one half gravity (it had fluctuated during the few days just past, but for that moment it seemed steady)—it fell against its neighbor, and both went down with a crash, followed by a faint tinkle. Two down—four to go. They were still outnumbered.

Juli's screaming reached a new pitch. A brazing-tool mechanical waved his hand at her and came on in. Angelo thanked his God they weren't using lasers, which were

available in the outer shell. But what they had was bad enough. He continued to charge forward.

The mechanical turned to face him. Getting burned to death was not Angelo's happy idea of how to spend an hour or so. He ducked, tried to come from under again, but the mechanical shifted position, aimed down.

Angelo rolled just in time. (And when was the eclipse due? When would they be over Peking? Any minute. . . .) When he rose he headed for the air lock. If he could get them there, he might be able to off-balance them into space, lifting them off the ground.

Dr. Emmis had had something of the same idea. With brute strength Angelo hadn't known the big doctor owned, Dr. Emmis had lifted one mechanical by the feet and was using it as a sort of whirling ram against the others. But he was tiring: it couldn't go on forever. Angelo inched toward the air lock—

Which opened.

"Okay," Chris Shaw said, somehow managed to aim the laser he carried—which was, for him, a little like aiming a hand-held cannon—and fired. One down. Two down. Three down. The fourth, a victim of Dr. Emmis' tactics, seemed to be out of commission.

Captain Zugzwang, who lay unconscious on the floor (he'd tried to pick a fight with one, and he hadn't Angelo's back-street boyhood experience in such matters), was picked up by the team of Emmis & DiStefano. The junior member of the team had breath to ask Chris Shaw:

"Where'd you get the laser?"

"Mechanicals' supplies. I'm the only one small enough to get through some of those corridors, and it occurred to me, once the Comm Center was put out of commission"—he stopped, gulped and went on—"that you might need help." His suit was spattered with melted metals, and an occasional spare part. "I had to—to get rid of a few of them on the way back," he said. "They were monsters . . . but they were machines, too." He gulped again.

If Angelo had had the strength, and the spare arm, he'd have patted Chris on the back, and told him he was sorry. As it was, Chris would undoubtedly get a medal or two—but medals wouldn't matter to Chris.

They were given out by human beings, after all, weren't they?

XXV

FLOATING out to the boat was, as everyone knew it would be, unpleasant; it was also manageable. When all were aboard, Dr. Emmis said, "He's awake now. The mechanicals' war did that, if nothing else did."

Captain Zugzwang nodded. Heavily, he went to the rig Chris had activated for him. "Mr. Korkianovich," he said. "Earth has signaled a change in the arming code. I leave it to you, as maintenance man, to go into the arming circuit and to change the code. Earth will give the change, and release the arming circuit for entry, at exactly—" He stopped and looked at Angelo.

"Twelve-oh-two," Angelo said, giving the Captain the precise time of the Station's appearance over Peking.

"—twelve-oh-two," Captain Zugzwang said without noticeable pause. "This is an order. Repeat, this is an order." The rig clicked out.

"And—before then?" Chris said. "If Earth does send up a signal?"

"It won't matter," Angelo said. "Manual won't fire, and TIC won't fire, remember?

"But if he does manage to get through to the arming circuit, and the Station doesn't blow—"

"I may not have mentioned it," Angelo said, very softly, "but I added a bypass circuit to the thing, before we went out: The signal doesn't matter: it won't get through. We'll blow, all right."

The boat, cramped, overloaded, was heading around the world—not toward the African Station, since that Station would automatically blow them out of the sky, but above it, at the other side of the Earth. The explosion about to occur would not be pleasant, and everyone wanted as much distance as possible. From a point a bit beyond the African Station, then, they'd head straight down. A sad and silent Woorden, resigned to the African Station as alone in space (or *apparently* resigned, Angelo corrected himself), calculated that they would come down somewhere near Dijon, in France.

And, meanwhile, the boat's radio brought them more news of the fighting in Asia, more analysis and comment—and more music.

"So many men," Juli moaned, "all right next to me. Oh, I know I'm helpless. . . ."

Angelo let his mind turn off the sound of Juli's words. Instead, he listened to the music, currently being broadcast through the boat. The station had begun an oratorio now, and if he remembered this one exactly . . .

Twelve.

Twelve-oh-one.

Twelve-oh-two.

The radiation was palpable through closed eyes.

"God," Woorden said, "have mercy on his soul."

And the station played on. Angelo had been right. The words to this one section of Handel's *Samson* were strangely, weirdly appropriate:

Aria (Samson):

Total eclipse! no sun, no moon,
All dark amidst the blaze of noon!
Oh glorious light no cheering ray,
To glad my eyes with welcome day!
Why thus depriv'd Thy prime decree?
Sun, moon and stars are dark to me?

Chorus of Israelites:

Oh first created beam! and Thou great word:
Let there be light! and light was over all.
One heav'nly blaze shone round this earthly ball,
To thy dark servant, life, by light afford!

The descent continued.

"DiStefano," Captain Zugzwang said after an interval.

"Yes, sir?" Angelo said.

"About that visual aids program you missed . . ."

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